FORM 3

AMENDED REPORT ☐

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

APPLICATION FOR PERMIT TO DRILL		1. WELL NAME and NUMBER: NBU 920-12J
2. TYPE OF WORK: DRILL NEW WELL (●) REENTER P&A WELL ( ) DEEPEN WELL ( )		3. FIELD OR WILDCAT: NATURAL BUTTES
4. TYPE OF WELL: Gas Well Coalbed Methane Well: NO		5. UNIT or COMMUNITIZATION AGREEMENT NAME: NATURAL BUTTES
6. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.		7. OPERATOR PHONE: 720 929-6587
8. ADDRESS OF OPERATOR: P.O. Box 173779, Denver, CO, 80217		9. OPERATOR E-MAIL: mary.mondragon@anadarko.com
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE): UTU-0144868B	11. MINERAL OWNERSHIP: FEDERAL (●) INDIAN ( ) STATE ( ) FEE ( )	12. SURFACE OWNERSHIP: FEDERAL ( ) INDIAN (●) STATE ( ) FEE ( )
13. NAME OF SURFACE OWNER (if box 12 = 'fee')		14. SURFACE OWNER PHONE (if box 12 = 'fee')
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')		16. SURFACE OWNER E-MAIL (if box 12 = 'fee')
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN'): Ute	18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS: YES ( ) (Submit Commingling Application) NO (●)	19. SLANT: VERTICAL (●) DIRECTIONAL ( ) HORIZONTAL ( )

20. LOCATION OF WELL	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
LOCATION AT SURFACE	2014 FSL 1926 FEL	NWSE	12	9.0 S	20.0 E	S
Top of Uppermost Producing Zone	2014 FSL 1926 FEL	NWSE	12	9.0 S	20.0 E	S
At Total Depth	2014 FSL 1926 FEL	NWSE	12	9.0 S	20.0 E	S

21. COUNTY: UINTAH	22. DISTANCE TO NEAREST LEASE LINE (Feet): 1926	23. NUMBER OF ACRES IN DRILLING UNIT: 600
	25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed): 1000	26. PROPOSED DEPTH: MD: 10700 TVD:
27. ELEVATION - GROUND LEVEL: 4701	28. BOND NUMBER: WYB000291	29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE: Permit #43-8496

ATTACHMENTS

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORCANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES

☑ WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER	☑ COMPLETE DRILLING PLAN
☐ AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)	☐ FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER
☐ DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)	☑ TOPOGRAPHICAL MAP

NAME: Kevin McIntyre	TITLE: Regulatory Analyst I	PHONE: 720 929-6226
SIGNATURE	DATE: 09/25/2008	EMAIL: Kevin.McIntyre@anadarko.com

API NUMBER ASSIGNED	APPROVAL
43047501250000	 Permit Manager

Proposed Hole, Casing, and Cement						
String	**Hole Size**	**Casing Size**	**Top (MD)**	**Bottom (MD)**		
Surf	12.25	9.625	0	2800		
Pipe	**Grade**	**Length**	**Weight**			
	Grade J-55 LT&C	2800	36.0			
	Cement Interval	**Top (MD)**	**Bottom (MD)**			
		0	2800			
		Cement Description	**Class**	**Sacks**	**Yield**	**Weight**
			Premium Foamed Cement	215	1.18	15.6

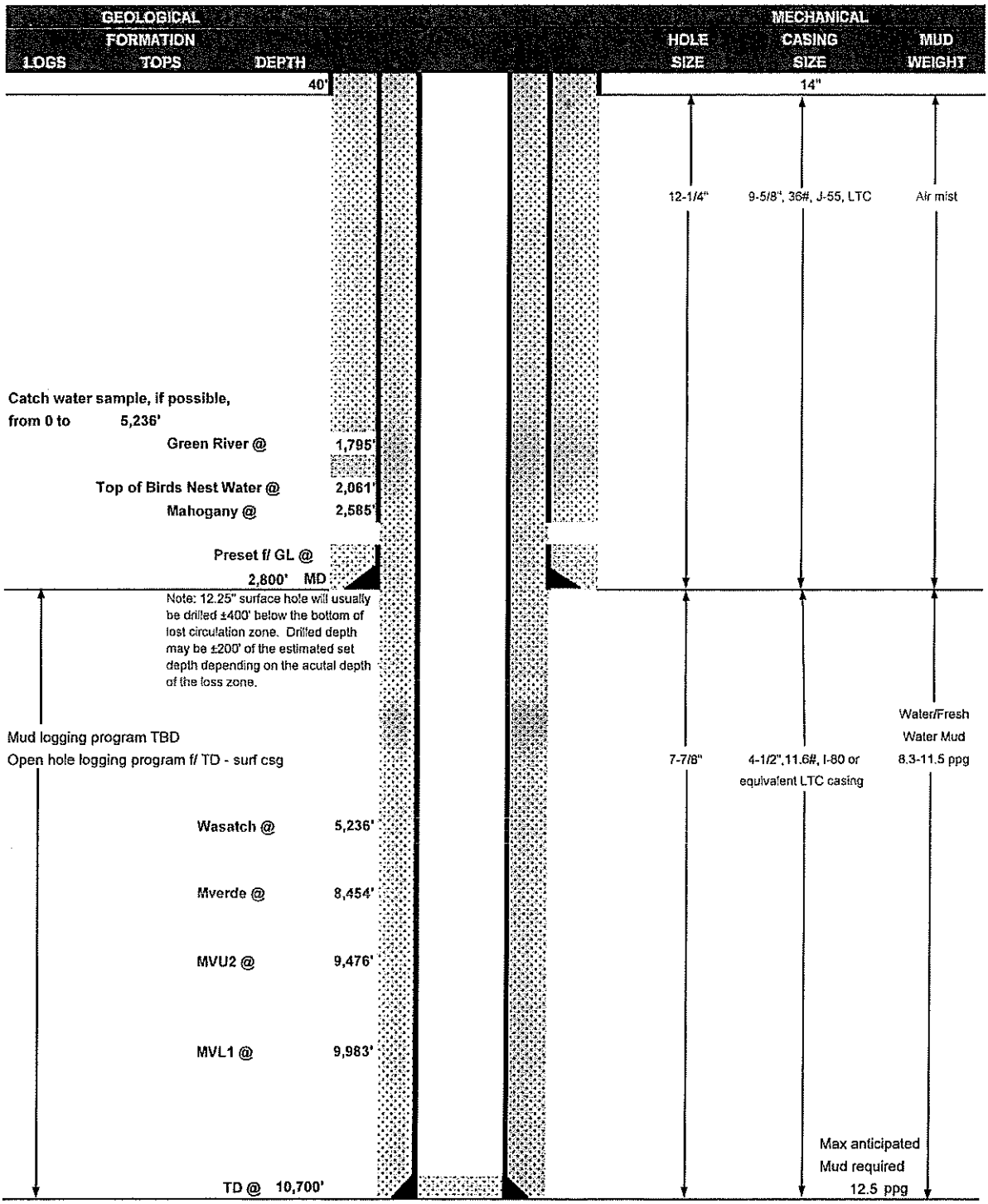
Proposed Hole, Casing, and Cement						
String	**Hole Size**	**Casing Size**	**Top (MD)**	**Bottom (MD)**		
Prod	7.875	4.5	0	10700		
Pipe	**Grade**	**Length**	**Weight**			
	Grade I-80 LT&C	10700	11.6			
	Cement Interval	**Top (MD)**	**Bottom (MD)**			
		0	10700			
		Cement Description	**Class**	**Sacks**	**Yield**	**Weight**
			Premium Lite High Strength	520	3.38	12.5
			Pozzuolanic Cement	1670	1.31	14.3

KerrMcGee

KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP		DATE	September 11, 2008	
WELL NAME	NBU 920-12J		TD	10,700' MD/TVD	
FIELD	Natural Buttes	COUNTY Uintah	STATE Utah	ELEVATION 4,701' GL	KB 4,716'
SURFACE LOCATION	NWSE 2014' FSL & 1926' FEL			BHL	Straight Hole
	Latitude: 40.048370	Longitude: -109.612150	NAD 27		
OBJECTIVE ZONE(S)	Mesaverde				
ADDITIONAL INFO	Regulatory Agencies: BLM (MINERALS), BIA (SURFACE), UDOGM, Tri-County Health Dept.				



KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL			WT.	GR.	CPLG.	DESIGN FACTORS BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'								
								3520	2020	453000
SURFACE	9-5/8"	0	to	2,800'	36.00	J-55	LTC	0.77	1.54	5.13
								7780	6350	201000
PRODUCTION	4-1/2"	0	to	10700	11.60	I-80	LTC	1.69	0.91	1.86

1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point)

2) MASP (Prod Casing) = Pore Pressure at TD - (.22 psi/ft-partial evac gradient x TD)

(Burst Assumptions: TD = 12.5 ppg) .22 psi/ft = gradient for partially evac wellbore

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

MASP 4280 psi

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500	Premium cmt + 2% CaCl	215	60%	15.60	1.18
Option 1			+ .25 pps flocele				
	TOP OUT CMT (1)	250	20 gals sodium silicate + Premium cmt	100		15.60	1.18
			+ 2% CaCl + .25 pps flocele				
	TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
SURFACE			NOTE: If well will circulate water to surface, option 2 will be utilized				
Option 2	LEAD	2000	Prem cmt + 16% Gel + 10 pps gilsonite	230	35%	11.00	3.82
			+.25 pps Flocele + 3% salt BWOC				
	TAIL	500	Premium cmt + 2% CaCl	180	35%	15.60	1.18
			+ .25 pps flocele				
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION	LEAD	4,730'	Premium Lite II + 3% KCl + 0.25 pps	520	60%	12.50	3.38
			celloflake + 5 pps gilsonite + 10% gel				
			+ 0.5% extender				
	TAIL	5,970'	50/50 Poz/G + 10% salt + 2% gel	1670	60%	14.30	1.31
			+.1% R-3				

*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

*Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.
PRODUCTION	Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint to top of tail cement with bow spring centralizers.

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. Test to 5,000 psi (annular to 2,500 psi) prior to drilling out. Record on chart recorder & tour sheet. Function test rams on each trip. Maintain safety valve & inside BOP on rig floor at all times. Kelly to be equipped with upper & lower kelly valves.

Drop Totco surveys every 2000'. Maximum allowable hole angle is 5 degrees.

Most rigs have PVT Systems for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER: _____ DATE: _____

Brad Laney

DRILLING SUPERINTENDENT: _____ DATE: _____

Randy Bayne

NBU 920-12J
NWSE Sec. 12, T9S,R20E
UINTAH COUNTY, UTAH
UTU-0144868B

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. Estimated Tops of Important Geologic Markers:

Formation	Depth
Uinta	0- Surface
Green River	1795'
Bird's Nest	2061'
Mahogany	2585'
Wasatch	5236'
Mesaverde	8454'
MVU2	9476'
MVL1	9983'
TD	10,700'

2. Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:

Substance	Formation	Depth
	Green River	1795'
	Bird's Nest	2061'
	Mahogany	2585'
Gas	Wasatch	5236'
Gas	Mesaverde	8454'
Gas	MVU2	9476'
Gas	MVL1	9983'
Water	N/A	
Other Minerals	N/A	

3. Pressure Control Equipment (Schematic Attached)

Please see the Natural Buttes Unit Standard Operating Procedure (SOP).

4. Proposed Casing & Cementing Program:

Please see the Natural Buttes Unit SOP. See attached drilling diagram.

5. Drilling Fluids Program:

Please see the Natural Buttes Unit SOP.

6. Evaluation Program:

Please see the Natural Buttes Unit SOP.

7. Abnormal Conditions:

Maximum anticipated bottomhole pressure calculated at 10,700' TD, approximately equals 6634 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 4280 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. Anticipated Starting Dates:

Drilling is planned to commence immediately upon approval of this application.

9. Variances:

Please see Natural Buttes Unit SOP Onshore Order #2 – Air Drilling Variance
Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- *Blowout Prevention Equipment (BOPE) requirements;*
- *Mud program requirements; and*
- *Special drilling operation (surface equipment placement) requirements associated with air drilling.*

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

Background
In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

The air rig is then mobilized to drill the surface casing hole by drilling a 12-1/4 inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 12-1/4 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 9-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

Variance for BOPE Requirements
The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

Variance for Mud Material Requirements
Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

Variance for Special Drilling Operation (surface equipment placement) Requirements
Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

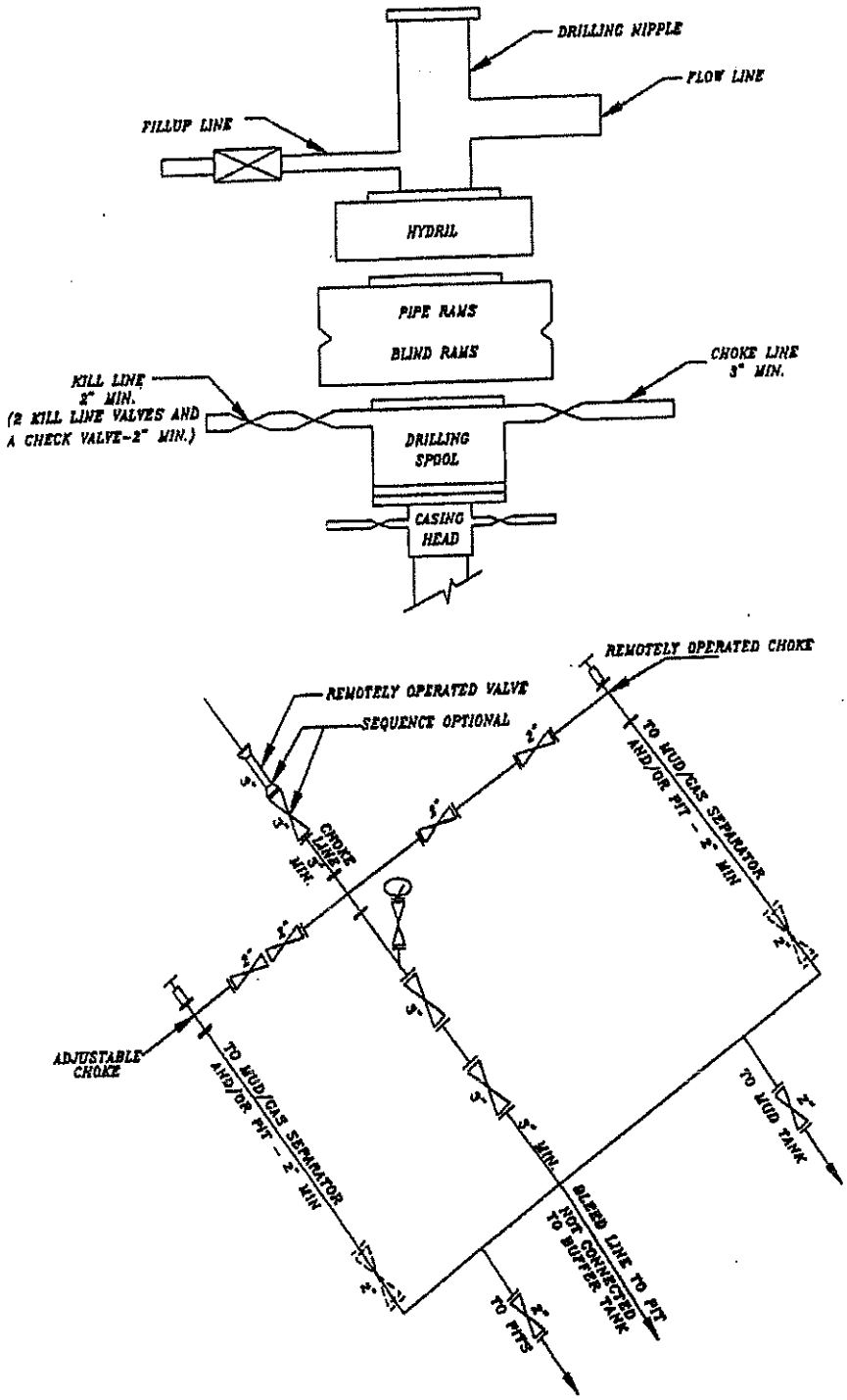
Conclusion
The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above..

10. Other Information:

Please see Natural Buttes Unit SOP.

NBU 920-12J

EXHIBIT A



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

NBU 920-12J
NWSE Sec. 12 ,T9S,R20E
UINTAH COUNTY, UTAH
UTU-0144868B

ONSHORE ORDER NO. 1

MULTI-POINT SURFACE USE & OPERATIONS PLAN

1. **Existing Roads:**

   Refer to the attached location directions.

   Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

2. **Planned Access Roads:**

   Approximately 1,920' +/- of new access road is proposed. Refer to Topo Map B.

   Existence of pipelines; maximum grade; turnouts; major cut and fills, culverts, or bridges; gates, cattle guards, fence cuts, or modifications to existing facilities were determined at the on-site.

   Please see the Natural Buttes Unit Standard Operating Procedure (SOP).

3. **Location of Existing Wells Within a 1-Mile Radius:**

   Please refer to Topo Map C.

4. **Location of Existing & Proposed Facilities:**

   Please see the Natural Buttes Unit SOP.

   Refer to Topo Map D for the location of the proposed pipelines.

   A right-of-way is required for the pipeline. The pipeline is approximately 1,489' in length and 30' in width. A 4" surface steel pipeline will be constructed utilizing existing disturbance where possible. The pipeline will be butt-welded together and pulled into place with a rubber tired tractor.

Variances to Best Management Practices (BMPs) Requested:

Approximately 1,489' of 4" steel pipeline will be installed on surface within the access corridor for the well location. As a Best Management Practice (BMP), the pipeline would be buried within the access road corridor if possible. The construction of pipelines requires the corridor of 30 feet.

This exception to the BMP should be granted by the BLM Authorized Officer because indurated bedrock, such as sandstone, is at or within 2 feet of the surface and the soil has a poor history for successful rehabilitation.

All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The requested color is Shadow gray (2.5Y 6/2), a non-reflective earthtone.

Interim Surface Reclamation Plan:

This exception is requested due to the current twin and multi-well program. If determined that this well will not be a candidate for either twinning &/or multi-well the operator shall spread the topsoil pile on the location up to the rig anchor points. The location will be reshaped to the original contour to the extent possible. The operator will reseed the area using the BLM recommended seed mixture and reclamation methods.

5. Location and Type of Water Supply:

Please see the Natural Buttes SOP.

6. Source of Construction Materials:

Please see the Natural Buttes SOP.

7. Methods of Handling Waste Materials:

Please see the Natural Buttes SOP.

A plastic reinforced liner is to be used as discussed during on-site inspection. It will be a minimum of 20 mil thick and felt, with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash or scrap that could puncture the liner will be disposed of in the pit.

Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to one of the pre-approved disposal sites: RNI, Sec. 5, T9S, R22E, NBU #159, Sec. 35, T9S R21E, Ace Oilfield, Sec. 2, T6S, R20E, MC&MC, Sec. 12, T6S, R19E, Pipeline Facility Sec. 36, T9S, R20E,Goat Pasture Evaporation Pond SW/4 Sec. 16, T10S, R22E, Bonanza Evaporation Pond Sec. 2, T10S, R23E *(Request is in lieu of filing Form 3160-5, after initial production).*

8. Ancillary Facilities:

Please see the Natural Buttes SOP.

9. **Well Site Layout:** (See Location Layout Diagram)

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills, and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram to describe rig orientation, parking areas, and access roads.

Location size may change prior to the drilling of the well due to the current rig availability. If the proposed location is not large enough to accommodate the drilling rig. The location will be re-surveyed and a form 3160-5 will be submitted.

10. **Plans for Reclamation of the Surface:**

Please see the Natural Buttes SOP.

Upon reclamation of the pit the following seed mixture will be used. A total of 12 lbs/acre will be used if the seeds are drilled (24 lbs/acre if the seeds are broadcast). The per acre requirements for ***drilled*** seed are:

Crested Wheatgrass 12 lbs.

Operator shall call the BLM for the seed mixture when final reclamation occurs.

11. **Surface/Mineral Ownership:**

The well pad and access road are located on lands owned by:

Ute Indian Tribe
P.O. Box 70
Fort Duchesne, Utah 84026
(435) 722-5141

The mineral ownership is listed below:

United States of America
Bureau of Land Management
170 South 500 East
Vernal, UT 84078
(435)781-4400

12. Stipulations/Notices/Mitigation:

There are no stipulations or notices for this location.

13. Other Information:

A Class III archaeological survey has been performed and will be submitted. A paleontology report (IPC #08-142) has been performed by Inter-Mountain Paleo Consulting (dated June 28, 2008) and is being submitted at this time.

This location is not within 460' from the boundary of the Natural Buttes Unit, nor is it within 460' of any non-committed tract lying within the boundaries of the Unit.

14. Lessee's or Operator's Representative & Certification:

Kevin McIntyre
Regulatory Analyst
Kerr-McGee Oil & Gas Onshore LP
P.O. Box 173779
Denver, CO 80217-3779
(720) 929-6226

Randy Bayne
Drilling Manager
Kerr-McGee Oil & Gas Onshore LP
1368 South 1200 East
Vernal, UT 84078
(435) 781-7018

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under the terms and conditions of the lease for the operations conducted upon leased lands.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Bureau of Land Management Nationwide Bond #WYB000291.

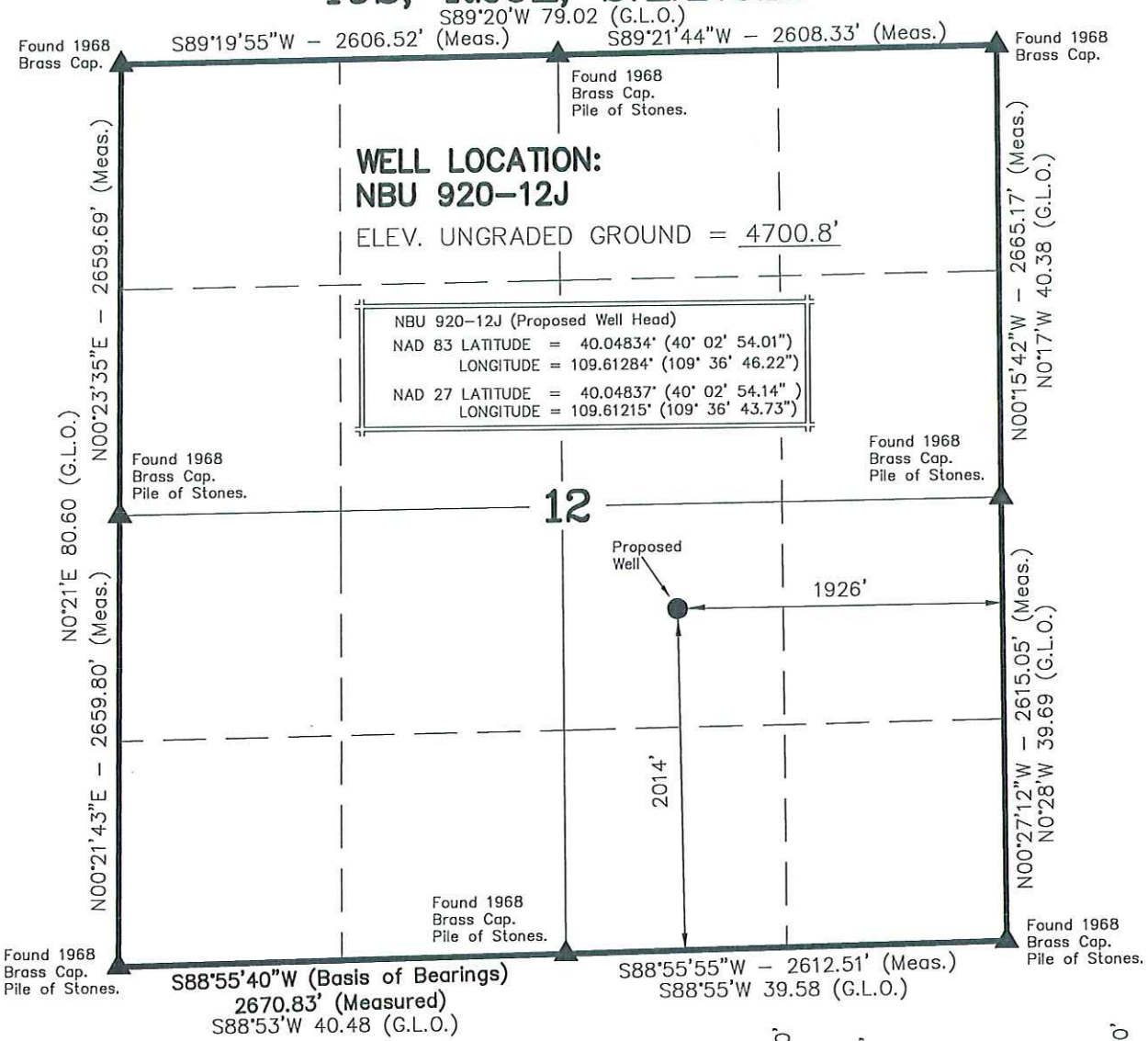
I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by the Operator, its contractors, and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

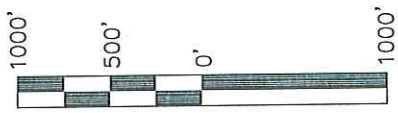
Kevin McIntyre

9/12/2008
Date

API Well No: 43047501250000

T9S, R20E, S.L.B.&M.





SCALE

NOTES:

▲ = Section Corners Located

1. Well footages are measured at right angles to the Section Lines.
2. G.L.O. distances are shown in feet or chains. 1 chain = 66 feet.
3. Bearings are based on Global Positioning Satellite observations.
4. Basis of elevation is the Northwest Corner of Section 12, T9S, R20E, S.L.B.&M. The elevation of this Section Corner is shown on the Ouray SE 7.5 Min. Quadrangle as being 4676'.

N

SURVEYOR'S CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR
REGISTRATION NO. 6028691
STATE OF UTAH

REGISTERED LAND SURVEYOR No.6028691 JOHN R SLAUGH STATE OF UTAH

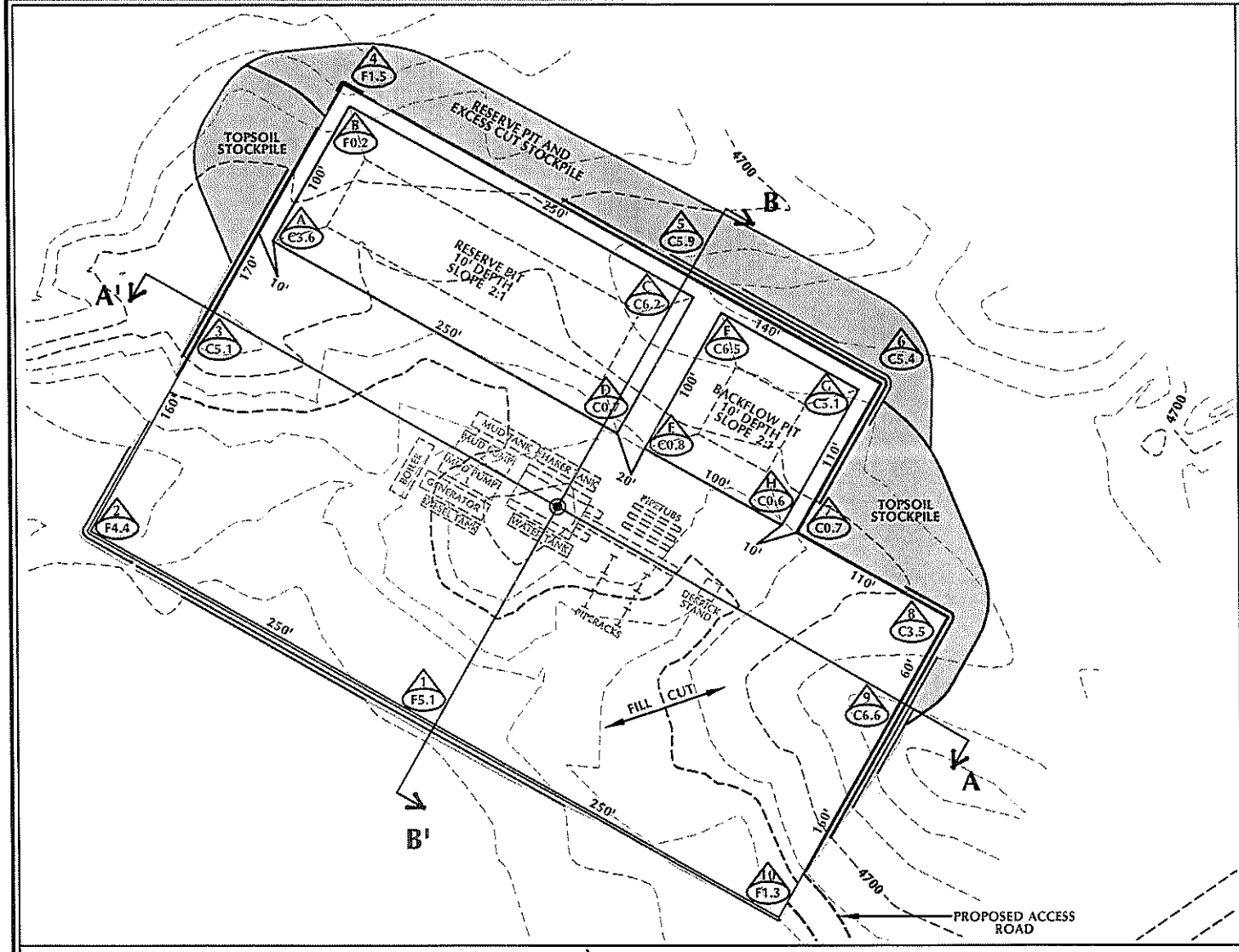
Kerr–McGee
Oil & Gas Onshore, LP
1099 18th Street – Denver, Colorado 80202

NBU 920-12J
WELL PLAT
2014' FSL, 1926' FEL
NW ¼ SE ¼ OF SECTION 12, T9S, R20E,
S.L.B.&M. UINTAH COUNTY, UTAH.

609
CONSULTING, LLC
371 Coffeen Avenue
Sheridan WY 82801
Phone 307-674-0609
Fax 307-674-0182

TIMBERLINE (435) 789-1365
ENGINEERING & LAND SURVEYING, INC.
38 WEST 100 NORTH – VERNAL, UTAH 84078

DATE SURVEYED: 06–23–08	SURVEYED BY: M.S.B.	SHEET 1 OF 9
DATE DRAWN: 07–07–08	DRAWN BY: B.R.B.	
SCALE: 1" = 1000'	Date Last Revised:	



WELL PAD LEGEND

- WELL LOCATION
- EXISTING CONTOURS (2' INTERVAL)
- PROPOSED CONTOURS (2' INTERVAL)

WELL PAD NBU 920-12J QUANTITIES

EXISTING GRADE @ LOC. STAKE = 4,700.8'
FINISHED GRADE ELEVATION = 4,697.3'
CUT SLOPES = 1.5:1
FILL SLOPES = 1.5:1

TOTAL CUT FOR WELL PAD = 7,661 C.Y.
TOTAL FILL FOR WELL PAD = 7,029 C.Y.
TOPSOIL @ 6" DEPTH = 3,008 C.Y.
TOTAL DISTURBANCE = 3.73 ACRES
SHRINKAGE FACTOR = 1.15
SWELL FACTOR = 1.00
RESERVE PIT CAPACITY (2' OF FREEBOARD)
+/- 25,880 BARRELS
RESERVE PIT VOLUME
+/- 7,185 CY
BACKFLOW PIT CAPACITY (2' OF FREEBOARD)
+/- 8,780 BARRELS
BACKFLOW PIT VOLUME
+/- 2,520 CY

HORIZONTAL 0 50 100 1" = 100'
2' CONTOURS

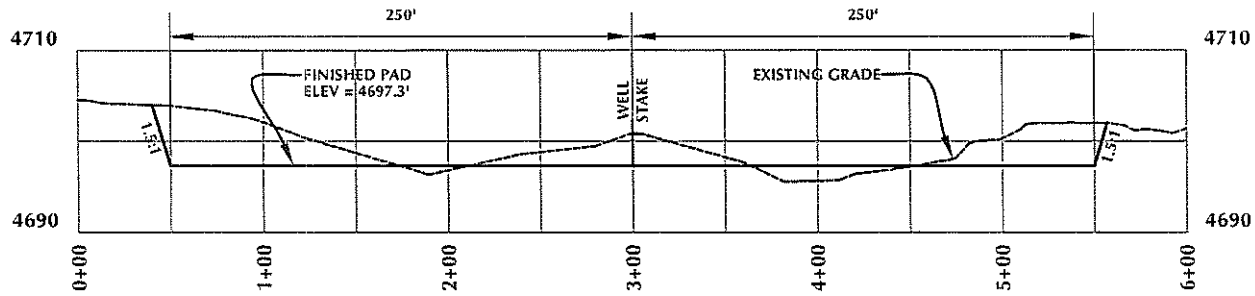
KERR-MCGEE OIL & GAS ONSHORE L.P.
1099 18th Street - Denver, Colorado 80202

NBU 920-12J
WELL PAD - LOCATION LAYOUT
2014' FSL, 1926' FEL
NW1/4SE1/4, SECTION 12, T.9S., R.20E.
S.L.B.&M., UINTAH COUNTY, UTAH

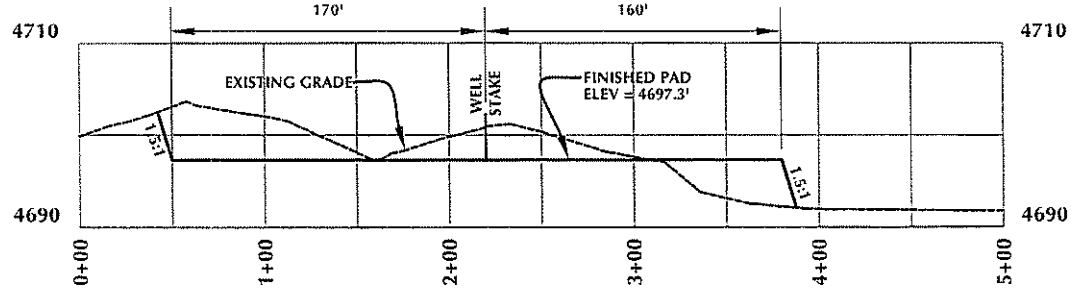
609 CONSULTING, LLC
371 Coffeen Avenue
Sheridan WY 82801
Phone 307-674-0609
Fax 307-674-0182

Scale: 1"=100'	Date: 8/15/08	SHEET NO: 2 OF 9
REVISED:	BY DATE	

Timberline Engineering & Land Surveying, Inc. (435) 789-1365
38 WEST 100 NORTH VERNAL, UTAH 84078



CROSS SECTION A-A'



CROSS SECTION B-B'

KERR-MCGEE OIL & GAS
ONSHORE L.P.
1099 18th Street - Denver, Colorado 80202

NBU 920-12J
WELL PAD - CROSS SECTIONS
2014' FSL, 1926' FEL
NW1/4SE1/4, SECTION 12, T.9S., R.20E.
S.L.B.&M., UINTAH COUNTY, UTAH

609
CONSULTING, LLC
371 Coffeen Avenue
Sheridan WY 82801
Phone 307-674-0609
Fax 307-674-0182

Scale: 1"=100'	Date: 8/15/08	SHEET NO:
REVISED:	BY DATE	3 OF 9

N

HORIZONTAL 0 50 100 1" = 100'
VERTICAL 0 10 20 1" = 20'

Timberline Engineering & Land Surveying, Inc.
38 WEST 100 NORTH VERNAL, UTAH 84078
(435) 789-1365

API Well No: 43047501250000

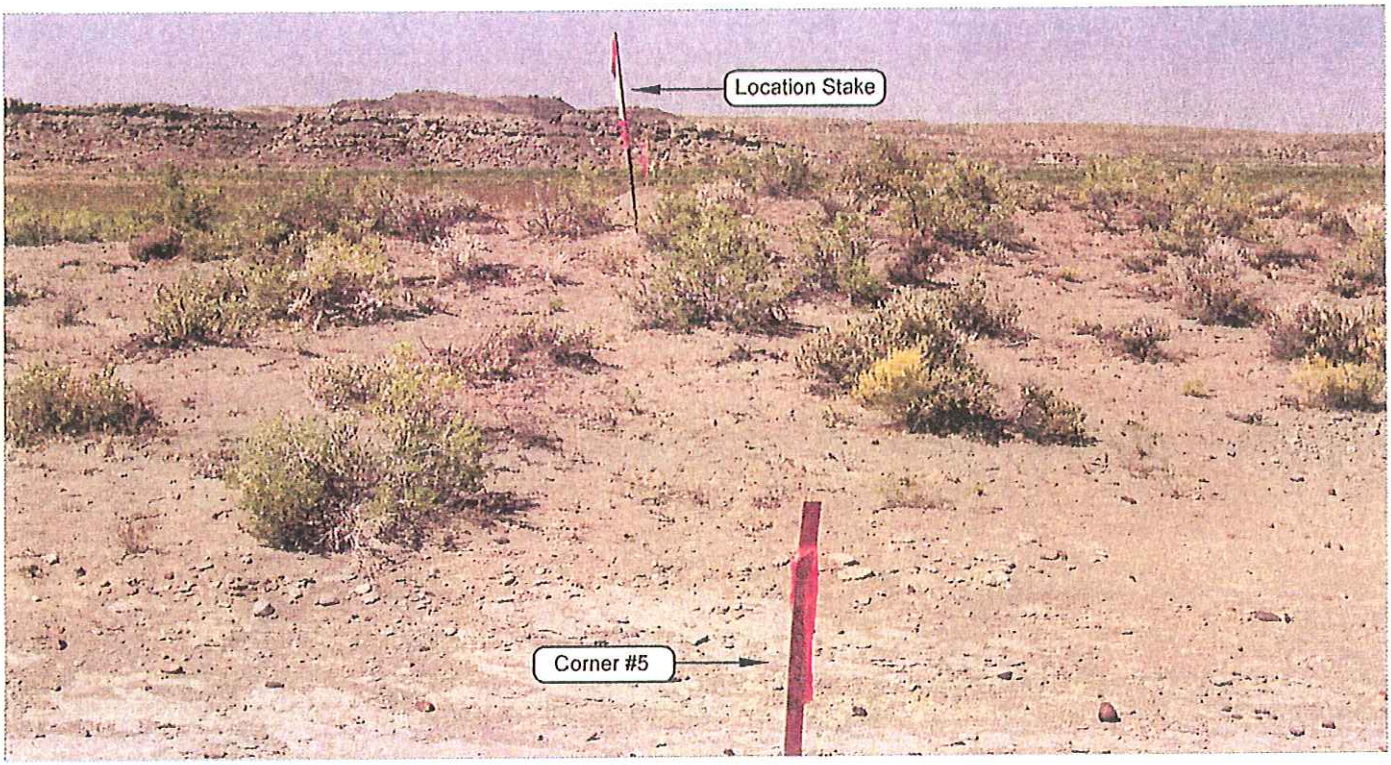


PHOTO VIEW: FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: SOUTHWESTERLY

PHOTO VIEW: FROM BEGINNING OF PROPOSED ROAD

CAMERA ANGLE: NORTHEASTERLY

Kerr–McGee
Oil & Gas Onshore, LP
1099 18th Street – Denver, Colorado 80202

NBU 920-12J
2014' FSL, 1926' FEL
NW ¼ SE ¼ OF SECTION 12, T9S, R20E,
S.L.B.&M. UINTAH COUNTY, UTAH.

609
CONSULTING, LLC
371 Coffeen Avenue
Sheridan WY 82801
Phone 307-674-0609
Fax 307-674-0182

LOCATION PHOTOS		DATE TAKEN: 7-29-08
		DATE DRAWN: 7-31-08
TAKEN BY: M.S.B.	DRAWN BY: J.R.S.	REVISED:

Timberline (435) 789-1365
Engineering & Land Surveying, Inc.
38 WEST 100 NORTH VERNAL, UTAH 84078

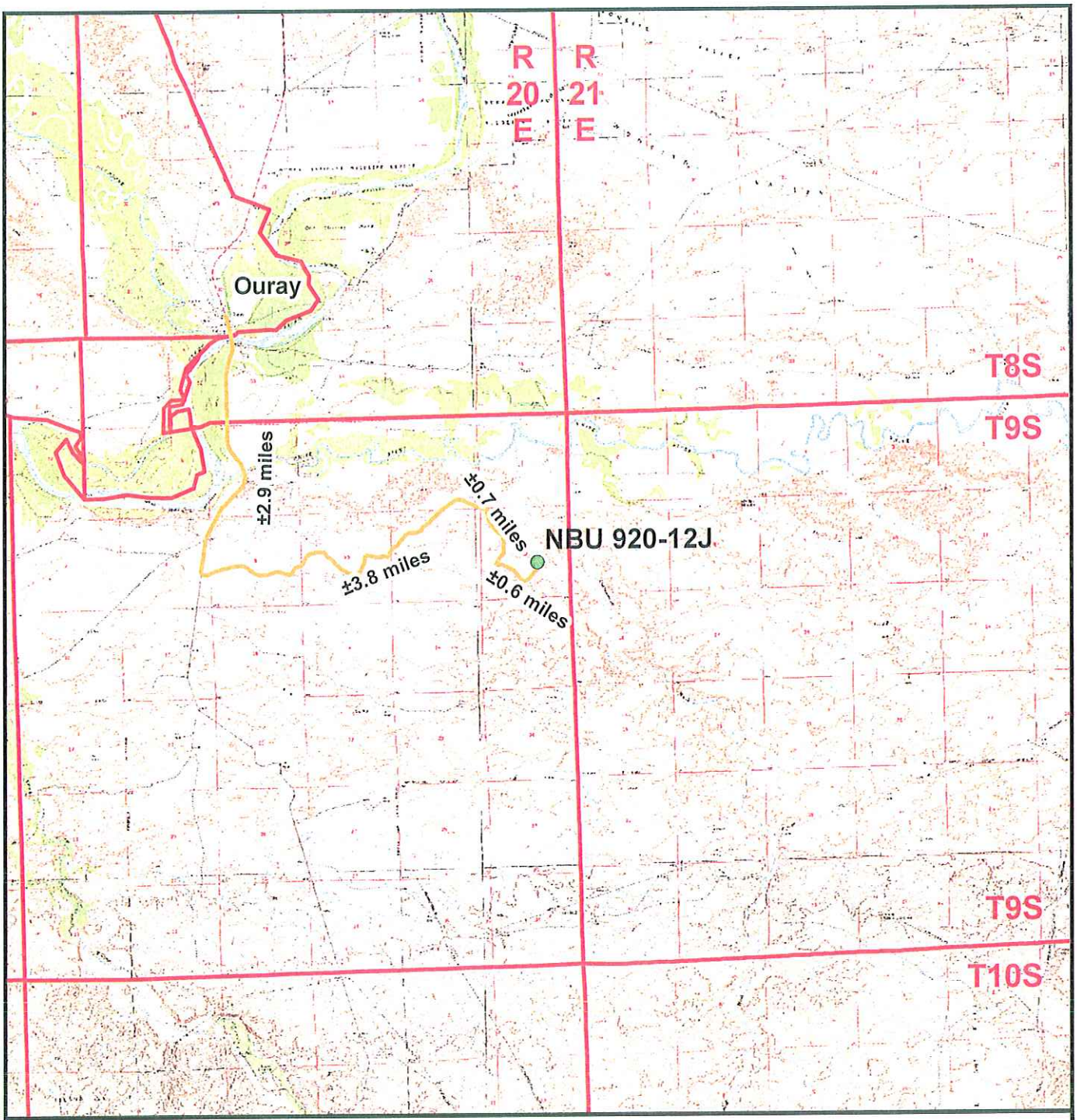
SHEET
4
OF 9

Kerr-McGee Oil & Gas Onshore, LP
NBU 920-12J
Section 12, T9S, R20E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 13.9 MILES TO THE JUNCTION OF STATE HIGHWAY 88. EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION ALONG STATE HIGHWAY 88 APPROXIMATELY 16.8 MILES TO OURAY, UTAH. FROM OURAY, PROCEED IN A SOUTHERLY DIRECTION ALONG THE SEEP RIDGE ROAD (COUNTY B ROAD 2810) APPROXIMATELY 2.9 MILES TO THE INTERSECTION OF AN EXISTING ROAD TO THE EAST. EXIT LEFT AND PROCEED IN A NORTHEASTERLY DIRECTION ALONG EXISTING ROAD APPROXIMATELY 3.8 MILES TO THE INTERSECTION OF AN EXISTING ROAD TO THE SOUTH. EXIT RIGHT AND PROCEED IN A SOUTHERLY DIRECTION ALONG EXISTING ROAD APPROXIMATELY 0.7 MILES TO THE PROPOSED ACCESS ROAD FOR NBU 920-12I. FOLLOW NBU 920-12I ROAD FLAGS IN A SOUTHEASTERLY THEN NORTHEASTERLY DIRECTION APPROXIMATELY 2,970 FEET TO THE PROPOSED ACCESS ROAD. FOLLOW ROAD FLAGS IN A NORTHERLY DIRECTION APPROXIMATELY 210 FEET TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 38.7 MILES IN A SOUTHERLY DIRECTION.

API Well No: 43047501250000



Legend

Proposed NBU 920-12J Well Location

Access Route - Proposed

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street, Denver, Colorado 80202

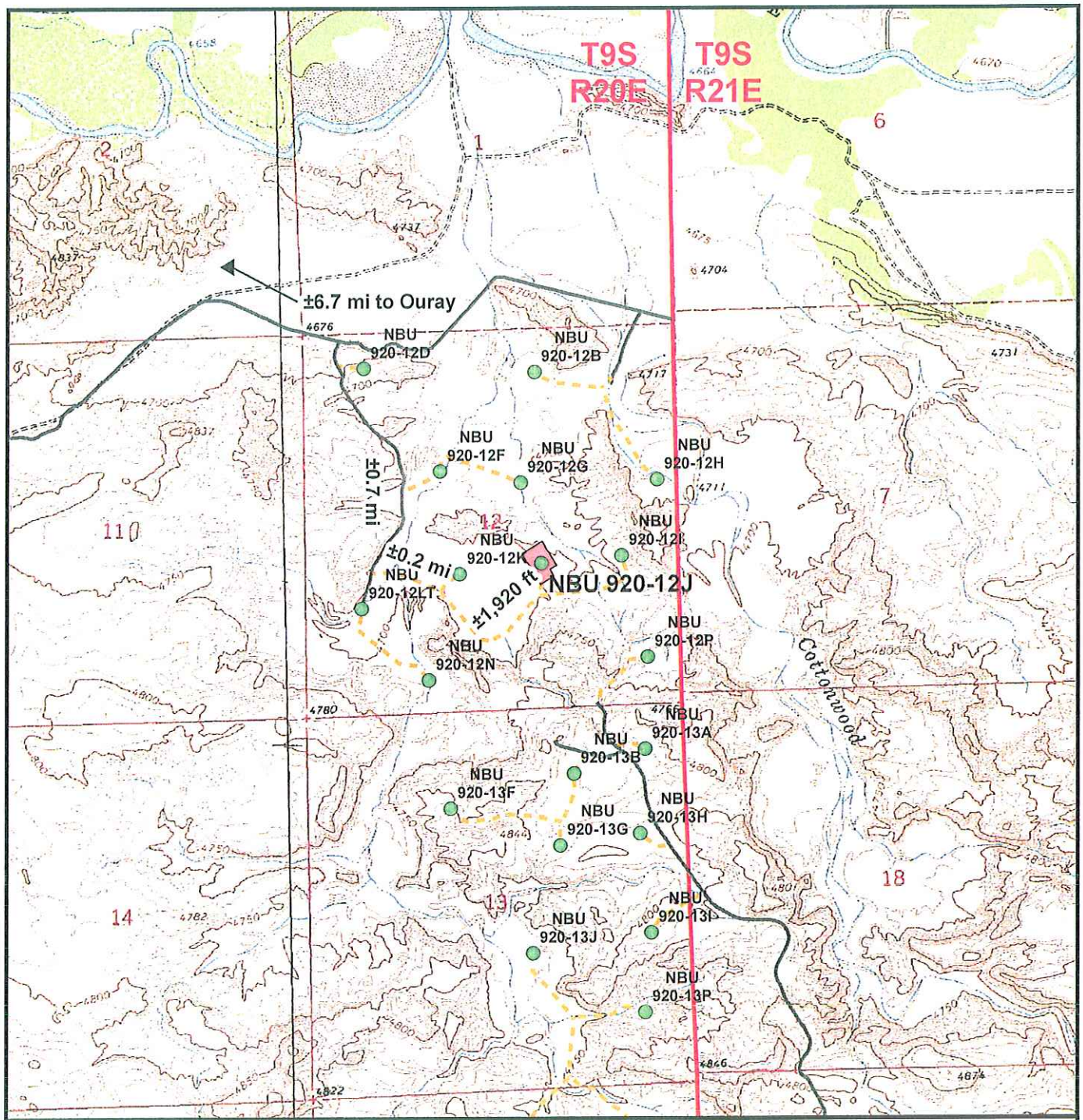
NBU 920-12J
Topo A
2014' FSL, 1926' FEL
NW¼ SE¼, Section 12, T9S, R20E
S.L.B.&M., Uintah County, Utah

609 CONSULTING, LLC
371 Coffeen Avenue
Sheridan, WY 82801
Phone (307) 674-0609
Fax (307) 674-0182

N

Scale: 1:100,000	NAD83 USP Central	Sheet No: 5	5 of 9
Drawn: JELo	Date: 14 Aug 2008		
Revised:	Date:		

API Well No: 43047501250000



Legend

Well - Proposed | Well Pad | Road - Proposed | Road - Existing

Total Proposed Road Length = ±1,920 ft

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street, Denver, Colorado 80202

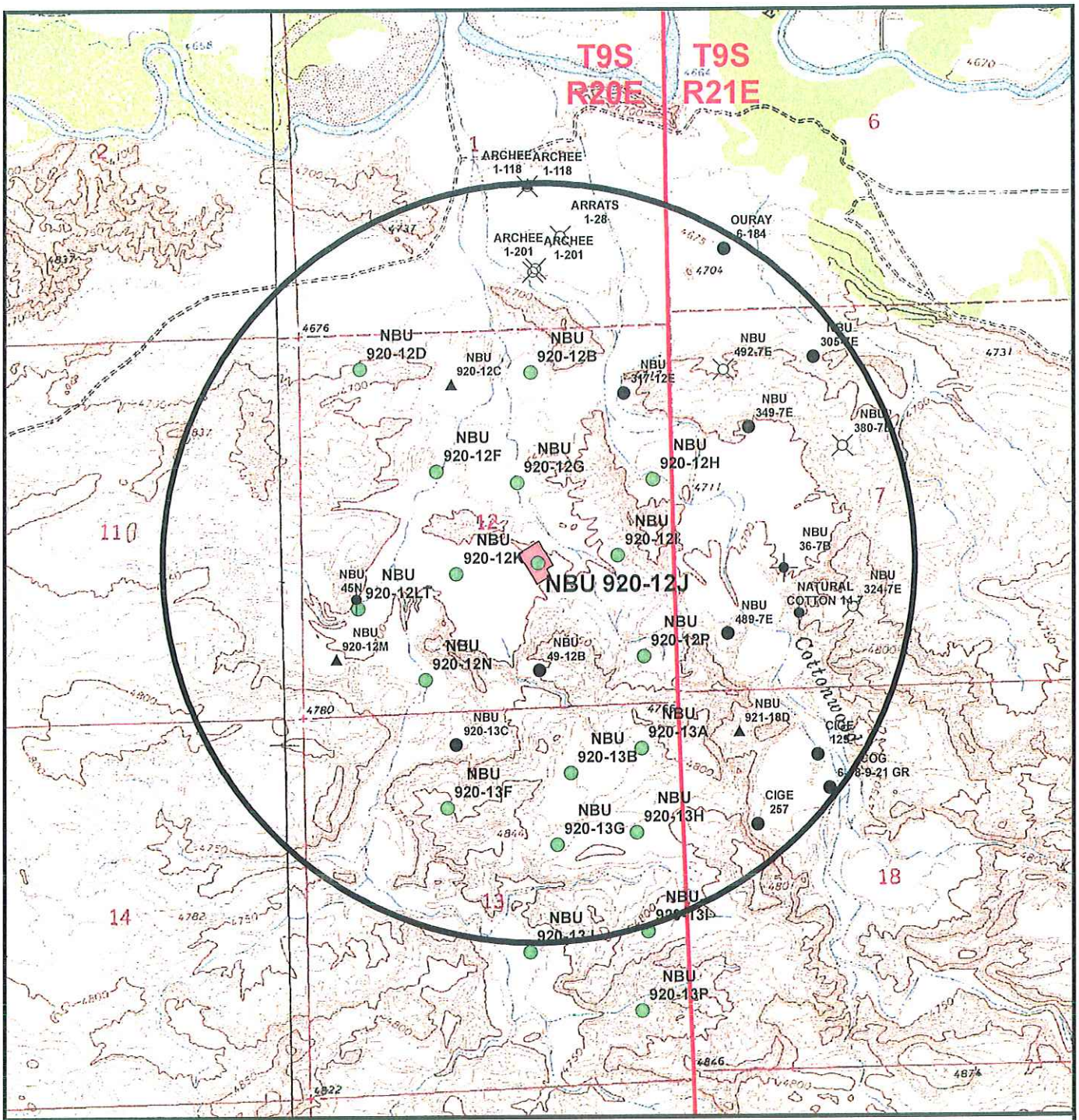
NBU 920-12J
Topo B
2014' FSL, 1926' FEL
NW¼ SE¼, Section 12, T9S, R20E
S.L.B.&M., Uintah County, Utah

609 CONSULTING, LLC
371 Coffeen Avenue
Sheridan, WY 82801
Phone (307) 674-0609
Fax (307) 674-0182

N

Scale: 1" = 2000ft	NAD83 USP Central	Sheet No:	
Drawn: JELo	Date: 14 Aug 2008	6	6 of 9
Revised:	Date:		

API Well No: 43047501250000



Legend

Well locations derived from State of Utah, Dept. of Natural Resources, Division of Oil, Gas and Mining

- Well - Proposed
- Well - 1 Mile Radius
- Well Pad
- Producing
- Approved permit (APD); not yet spudded
- Spudded (Drilling commenced: Not yet comple
- Location Abandoned
- Temporarily-Abandoned
- Plugged and Abandoned
- Shut-In

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street, Denver, Colorado 80202

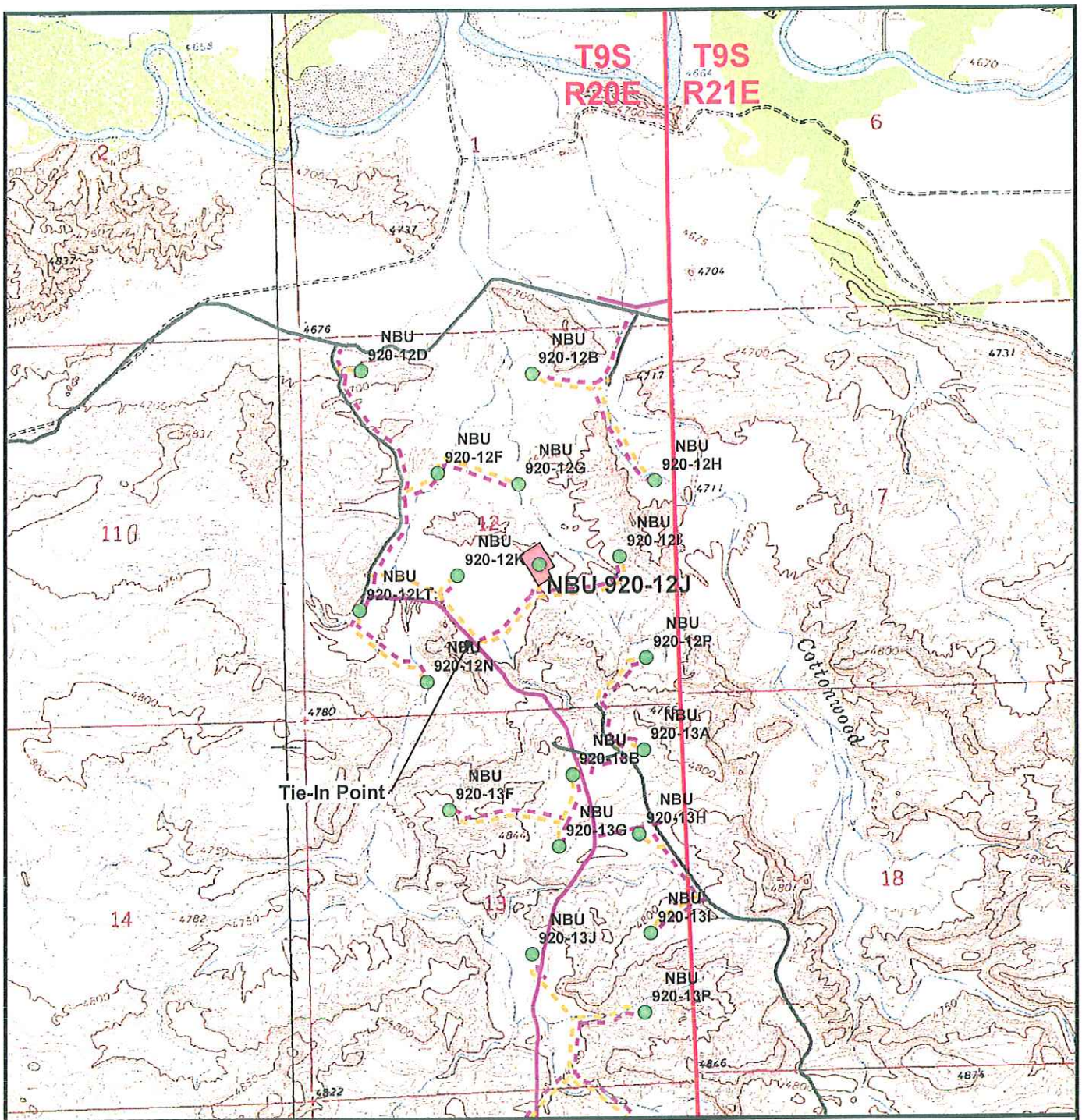
NBU 920-12J
Topo C
2014' FSL, 1926' FEL
NW¼ SE¼, Section 12, T9S, R20E
S.L.B.&M., Uintah County, Utah

609 CONSULTING, LLC
371 Coffeen Avenue
Sheridan, WY 82801
Phone (307) 674-0609
Fax (307) 674-0182

N

Scale: 1" = 2000ft	NAD83 USP Central	Sheet No: 7	7 of 9
Drawn: JELo	Date: 14 Aug 2008		
Revised:	Date:		

API Well No: 43047501250000



Legend

Total Proposed Pipeline Length: ±1,489ft

Well - Proposed | Well Pad | Pipeline - Proposed | Road - Proposed | Pipeline - Existing | Road - Existing

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street, Denver, Colorado 80202

NBU 920-12J
Topo D
2014' FSL, 1926' FEL
NW¼ SE¼, Section 12, T9S, R20E
S.L.B.&M., Uintah County, Utah

609 CONSULTING, LLC
371 Coffeen Avenue
Sheridan, WY 82801
Phone (307) 674-0609
Fax (307) 674-0182

N

Scale: 1" = 2000ft	NAD83 USP Central	Sheet No: 8	8 of 9
Drawn: JELo	Date: 14 Aug 2008		
Revised:	Date:		

IPC #08-142

Paleontological Reconnaissance Survey Report

Survey of Kerr McGee's Proposed Well Pads, Access Roads, and Pipelines for "NBU #920-12B, D, E, F, G, H, I, J & K; #920-13A, B & H" (Sec. 12 & 13, T 9 S, R 20 E)

Ouray SE
Topographic Quadrangle
Uintah County, Utah

June 28, 2008

Prepared by Stephen D. Sandau
Paleontologist for
Intermountain Paleo-Consulting
P. O. Box 1125
Vernal, Utah 84078

INTRODUCTION

At the request of Raleen White of Kerr McGee Onshore LP and authorized by Bruce Pargeets of the Ute Indian Tribe and by Lynn Becker, EMD Land Division Manager of the Ute Indian Tribe's Energy and Minerals Department, a paleontological reconnaissance survey of Kerr McGee's proposed well pads, access roads, and pipelines for "NBU #920-12B, D, E, F, G, H, I, J & K; #920-13A, B & H" (Sec. 12 & 13, T 9 S, R 20 E) was conducted by Stephen D. Sandau, Arica Scheetz and Amanda Dopheide on June 26, 2008. The survey was conducted under the Ute Indian Tribe Business License FY 2008, #A08-1308 and the accompanying Access Permit (effective 3/26/2008 through 9/30/2008). This survey to locate, identify and evaluate paleontological resources was done to meet requirements of the National Environmental Policy Act of 1969 and other State and Federal laws and regulations that protect paleontological resources.

FEDERAL AND STATE REQUIREMENTS

As mandated by the Federal and State government, paleontologically sensitive geologic formations on State lands that are considered for exchange or may be impacted due to ground disturbance require paleontological evaluation. This requirement complies with:

1) The National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321.et. Seq., P.L. 91-190);
2) The Federal Land Policy and Management Act (FLPMA) of 1976 (90 Stat. 2743, 43 U.S.C. § 1701-1785, et. Seq., P.L. 94-579) and
3) The National Historic Preservation Act.16 U.S.C. § 470-1, P.L. 102-575 in conjunction with 42 U.S.C. § 5320

The new Potential Fossil Yield Classification (PFYC) System (October, 2007) replaces the Condition Classification System from Handbook H-8270-1. Geologic units are classified based on the relative abundance of vertebrate fossils or scientifically significant invertebrate or plant fossils and their sensitivity to adverse impacts, with a higher class number indicating a higher potential.

- ***Class 1*** **– Very Low.** Geologic units (igneous, metamorphic, or Precambrian) not likely to contain recognizable fossil remains.
- ***Class 2*** **– Low.** Sedimentary geologic units not likely to contain vertebrate fossils or scientifically significant non-vertebrate fossils. (Including modern eolian, fluvial and colluvial deposits etc…)
- ***Class 3*** **– Moderate or Unknown.** Fossiliferous sedimentary geologic units where fossil content varies in significance, abundance, and predictable occurrence; or sedimentary units of unknown fossil potential.
    - ***Class 3a*** **– Moderate Potential.** The potential for a project to be sited on or impact a significant fossil locality is low, but is somewhat higher for common fossils.
    - ***Class 3b*** **– Unknown Potential.** Units exhibit geologic features and preservational conditions that suggest significant fossils could be present, but little information about the paleontological resources of the unit or the area is known.

- *Class 4* – **High.** Geologic units containing a high occurrence of vertebrate fossils or scientifically significant invertebrate or plant fossils, but may vary in abundance and predictability.
    - *Class 4a* – Outcrop areas with high potential are extensive (greater than two acres) and paleontological resources may be susceptible to adverse impacts from surface disturbing actions.
    - *Class 4b* – Areas underlain by geologic units with high potential but have lowered risks of disturbance due to moderating circumstances such as a protective layer of soil or alluvial material; or outcrop areas are smaller than two contiguous acres.
- *Class 5* – **Very High.** Highly fossiliferous geologic units that consistently and predictably produce vertebrate fossils or scientifically significant invertebrate or plant fossils.
    - *Class 5a* - Outcrop areas with very high potential are extensive (greater than two acres) and paleontological resources may be susceptible to adverse impacts from surface disturbing actions.
    - *Class 5b* - Areas underlain by geologic units with very high potential but have lowered risks of disturbance due to moderating circumstances such as a protective layer of soil or alluvial material; or outcrop areas are smaller than two contiguous acres.

It should be noted that many fossils, though common and unimpressive in and of themselves, can be important paleo-environmental, depositional, and chronostratigraphic indicators.

LOCATION

Kerr McGee's proposed well pads, access roads, and pipelines for "NBU #920-12B, D, E, F, G, H, I, J & K; #920-13A, B & H" (Sec. 12 & 13, T 9 S, R 20 E) are located on Ute Indian Reservation land about 1 miles south of the White River and some 3.5 miles southeast of Ouray, Utah. The project area can be found on the Ouray SE 7.5 minute U. S. Geological Survey Quadrangle Map, Uintah County, Utah.

PREVIOUS WORK

The basins of western North America have long produced some of the richest fossil collections in the world. Early Cenozoic sediments are especially well represented throughout the western interior. Paleontologists started field work in Utah's Uinta Basin as early as 1870 (Betts, 1871; Marsh, 1871, 1875a, 1875b). The Uinta Basin is located in the northeastern corner of Utah and covers approximately 31,000 sq. km (12,000 sq. miles) ranging in elevation from 1,465 to 2,130 m (4,800 to 7,000 ft) (Marsell, 1964; Hamblin et al., 1987). Middle to late Eocene time marked a period of dramatic change in the climate, flora, (Stucky, 1992) and fauna (Black and Dawson, 1966) of North America.

GEOLOGICAL AND PALEONTOLOGICAL OVERVIEW

Early in the geologic history of Utah, some 1,000 to 600 Ma, an east-west trending basin developed creating accommodation for 25,000 feet of siliclastics. Uplift of that filled-basin during the early Cenozoic formed the Uinta Mountains (Rasmussen et al., 1999). With the rise of the Uinta Mountains the asymmetrical synclinal Uinta Basin is thought to have formed through the effects of down warping in connection with the uplift. Throughout the Paleozoic and Mesozoic deposition fluctuated between marine and non-marine environments laying down a thick succession of sediments in the area now occupied by the Uinta Basin. Portions of these beds crop out on the margins of the basin due to tectonic events during the late Mesozoic.

Early Tertiary Uinta Basin sediments were deposited in alternating lacustrine and fluvial environments. Large shallow lakes periodically covered most of the basin and surrounding areas during early to mid Eocene time (Abbott, 1957). These lacustrine sediments show up in the western part of the basin, dipping 2-3 degrees to the northeast and are lost in the subsurface on the east side. The increase of cross-bedded, coarse-grained sandstone and conglomerates preserved in paleo-channels indicates a transition to a fluvial environment toward the end of the epoch.

Four Eocene formations are recognized in the Uinta Basin: the Wasatch, Green River, Uinta and Duchesne River, respectively (Wood, 1941). The Uinta Formation is subdivided into two lithostratigraphic units namely: the Wagonhound Member (Wood, 1934), formerly known as Uinta A and B (Osborn, 1895, 1929) and the Myton Member previously regarded as the Uinta C.

Within the Uinta Basin in northeast Utah, the Uinta Formation in the western part of the basin is composed primarily of lacustrine sediments inter-fingering with over-bank deposits of silt, and mudstone and westward flowing channel sands and fluvial clays, muds, and sands in the east (Bryant et al, 1990; Ryder et al, 1976). Stratigraphic work done by early geologists and paleontologists within the Uinta Formation focused on the definition of rock units and attempted to define a distinction between early and late Uintan faunas (Riggs, 1912; Peterson and Kay, 1931; Kay 1934). More recent work focused on magnetostratigraphy, radioscopic chronology, and continental biostratigraphy (Flynn, 1986; Prothero, 1996). Well-known for its fossiliferous nature and distinctive mammalian fauna of mid-Eocene Age, the Uinta Formation is the type formation for the Uintan Land Mammal Age (Wood et al, 1941).

The Duchesne River Formation of the Uinta Basin in northeastern Utah is composed of a succession of fluvial and flood plain deposits composed of mud, silt, and sandstone. The source area for these late Eocene deposits is from the Uinta Mountains indicated by paleocurrent data (Anderson and Picard, 1972). In Peterson's (1931c) paper, the name "Duchesne Formation" was applied to the formation and it was later changed to the "Duchesne River Formation" by Kay (1934). The formation is divided up into four members: the Brennan Basin, Dry Gulch Creek, LaPoint, and Starr Flat (Anderson and Picard, 1972). Debates concerning the Duchesne River Formation, as to whether its age was late Eocene or early Oligocene, have surfaced throughout the literature of the last century (Wood et al., 1941; Scott 1945). Recent paleo-magnetostratigraphic work (Prothero, 1996) shows that the Duchesne River Formation is late Eocene in time.

FIELD METHODS

In order to determine if the proposed project area contained any paleontological resources, a reconnaissance survey was performed. An on-site observation of the proposed areas undergoing surficial disturbance is necessary because judgments made from topographic maps alone are often unreliable. Areas of low relief have potential to be erosional surfaces with the possibility of bearing fossil materials rather than surfaces covered by unconsolidated sediment or soils.

When found within the proposed construction areas, outcrops and erosional surfaces were checked to determine if fossils were present and to assess needs. Careful effort is made during surveys to identify and evaluate significant fossil materials or fossil horizons when they are found. Microvertebrates, although rare, are occasionally found in anthills or upon erosional surfaces and are of particular importance.

PROJECT AREA

The project area is situated in the Wagonhound Member (Uinta A & B) of the Uinta Formation. The following list provides a description of the individual wells and their associated pipelines and access roads.

NBU #920-12B
The proposed access road and pipeline travel approximately 500 ft west until they meet the proposed well pad for "NBU 920-12B" in the NW/NE quarter-quarter section of Sec. 12, T 9 S, R 20 E (Figure 1). The proposed access road, pipeline and well pad are staked on sloping ground covered by colluvium, outcrops of purple sandstone composed of subrounded, medium to course grains, and outcrops of light gray sandstone composed of subrounded, medium grains. The purple sandstone outcrops were observed approximately 20 ft south from the proposed pipeline and the light gray outcrops were observed approximately 10 ft west of the center stake. Isolated fragments of *Echmatemys* carapace and plastron were found around the purple sandstone.

NBU #920-12D
The proposed access road travels east where it meets the proposed well pad for "NBU 920-12D" in the NW/NW quarter-quarter section of Sec. 12, T 9 S, R 20 E (Figure 1). The proposed access road and well pad are staked on relatively flat ground covered almost entirely by eolian wind deposits. Although the ground is mostly covered in eolian blown sand, there was an outcrop of light brown sandstone composed of subrounded, medium grains approximately 10 feet east from the center stake. Isolated pieces of turtle carapace and plastron belonging to *Echmatemys* and pieces of a mammalian skull with enamel shards were found scattered around the sandstone, and a partial *Echmatemys* specimen was found *in-situ*.

NBU #920-12E
The proposed access road and pipeline travel east approximately 500 ft until meeting the proposed well pad for 'NBU 920-12E" in the SW/NW quarter-quarter section of Sec. 12, T 9 S, R 20 E (Figure 1). The proposed access road, pipeline, and well pad are staked on sloping ground that is covered by colluvium, reworked washout deposits, and large outcrops of purple sandstone composed of subrounded, medium to course grains. Fossils found in the area consisted of isolated pieces of carapace and plastron belonging to *Echmatemys* and a large bone fragment (brontothere?).

NBU #920-12F
The proposed access road and pipeline travel west approximately 500 ft from the existing road until they meet the proposed well pad for "NBU 920-12F" in the SE/NW quarter-quarter section of Sec. 12, T 9 S, R 20 E (Figure 1). The proposed access road, pipeline, and well pad are staked on relatively flat ground covered with colluvium and reworked washout deposits. No fossils were found.

NBU #920-12G
The proposed access road and pipeline travel west approximately 1,500 ft from the existing road until they meet the proposed well pad in the SW/NE quarter-quarter section of Sec. 12, T 9 S, R 20 E (Figure 1). The proposed access road, pipeline, and well pad are staked on relatively flat ground covered with colluvium and reworked washout deposits. No fossils were found.

NBU #920-12H
The proposed access road and pipeline travel approximately 500 ft southeast until they meet the proposed well pad for "NBU 920-12H" in the SE/NE quarter-quarter section of Sec. 12, T 9 S, R 20 E (Figure 1). The proposed access road, pipeline, and well pad are staked on sloping ground covered by colluvium and outcrops of purple sandstone composed of subrounded, medium grains. The purple sandstone outcrop was observed approximately 30 ft from south from the center stake, and 20 ft east of the proposed pipeline. Fossils found in the area included isolated fragments of *Echmatemys* carapace and plastron.

NBU #920-12I
The proposed access road and pipeline travel approximately 2,000 ft east until they meet with the proposed well pad "NBU 920-12I" in the NE/SE quarter-quarter section of Sec. 12, T 9 S, R 20 E (Figure 1). The proposed access road, pipeline, and well pad are staked on sloping ground covered by colluvium and outcrops of purple sandstone composed of subrounded, medium grains that are approximately 20 ft south of the proposed pipeline and well pad. Isolated fragments of turtle carapace and plastron belonging to *Echmatemys* were found around the sandstone and four highly weathered vertebrae possibly belonging to the suborder serpentes were found approximately 10 ft from the center stake.

NBU #920-12J
The proposed access road and pipeline branch off from the proposed access road and pipeline to "NBU 920-12I" and travel north to proposed well pad "NBU 920-12J" in the NW/SE quarter-quarter section of Sec. 12, T 9 S, R 20 E (Figure 1). The proposed access road, pipeline, and well pad are staked on sloping ground covered by colluvium and an outcrop of purple sandstone composed subrounded, medium grains. The outcrop of sandstone lies approximately 20 ft south from the proposed pipeline and well pad. Isolated fragments of *Echmatemys* carapace and plastron were found around the sandstone.

NBU #920-12K
The proposed access road and pipeline branch off the proposed access road and pipeline for "NBU 920-12I" and travel north to proposed well pad "NBU 920-12K" in the NE/SW quarter-quarter section of Sec. 12, T 9 S, R 20 E (Figure 1). The proposed access road, pipeline, and well pad are staked on sloping ground that is covered by colluvium and out crops of purple sandstone composed of subrounded, medium grains. The outcrop of sandstone lies approximately 20 ft south from the proposed pipeline and well pad. Isolated fragments of *Echmatemys* carapace and plastron were found around the sandstone.

NBU #920-13A
The proposed access road and pipeline travel east from the existing road until they meet the proposed well pad for "NBU 920-13A" in the NW/NE quarter-quarter section of Sec. 13, T 9 S, R 20 E (Figure 1). The proposed access road, pipeline, and well pad are staked on relatively flat ground covered by colluvium and purple outcrops of sandstone composed of subrounded, medium grains. The outcrops of purple sandstone were observed approximately 20 ft southeast of the central stake. Fossils found included several fragments of *Echmatemys* that were loosely associated to each other.

NBU #920-13B
The proposed access road and pipeline travel southwest from the existing road until they meet the proposed well pad for "NBU 920-13B" in the NW/NE quarter-quarter section of Sec. 13, T 9 S. R 20 E (Figure 1). The proposed access road, pipeline, and well pad are staked on relatively flat ground covered by colluvium and outcrops of purple sandstone composed of subrounded, medium grains. The outcrop of sandstone was observed approximately 20 ft west and 30 ft south from the well pad. Fossils found in the area included isolated fragments of *Echmatemys* carapace and plastron.

NBU #920-13H
The proposed access road and pipeline travel west from the existing road until they meet the proposed well pad for "NBU 920-13H" in the SE/NE quarter-quarter section of Sec. 13, T 9 S, R 20 E (Figure 1). The proposed access road, pipeline, and well pad are staked on flat ground that is covered by colluvium. No fossils were found.

SURVEY RESULTS

PROJECT	GEOLOGY	PALEONTOLOGY
"NBU #920-12B" (Sec. 12, T 9 S, R 20, E)	The proposed access road, pipeline and well pad are staked on sloping ground covered by colluvium, outcrops of purple sandstone composed of subrounded, medium to course grains, and outcrops of light gray sandstone composed of subrounded, medium grains. The purple sandstone outcrops were observed approximately 20 ft south from the proposed pipeline and the light gray outcrops were observed approximately 10 ft west of the center stake.	Isolated fragments of *Echmatemys* carapace and plastron were found around the purple sandstone. **Class 3a**
"NBU #920-12D" (Sec. 12, T 9 S, R 20, E)	The proposed access road and well pad are staked on relatively flat ground covered almost entirely by eolian wind deposits. Although the ground is mostly covered in eolian blown sand, there was an outcrop of light brown sandstone composed of subrounded, medium grains approximately 10 feet east from the center stake.	Isolated pieces of turtle carapace and plastron belonging to *Echmatemys* and pieces of a mammalian skull with enamel shards were found scattered around the sandstone, and a partial *Echmatemys* specimen was found *in-situ*. **Class 4a**
"NBU #920-12E" (Sec. 12, T 9 S, R 20, E)	The proposed access road, pipeline, and well pad are staked on sloping ground that is covered by colluvium, reworked washout deposits, and large outcrops of purple sandstone composed of subrounded, medium to course grains.	Fossils found in the area consisted of isolated pieces of carapace and plastron belonging to *Echmatemys* and a large bone fragment (brontothere?). **Class 4a**
"NBU #920-12F" (Sec. 12, T 9 S, R 20, E)	The proposed access road, pipeline, and well pad are staked on relatively flat ground covered with colluvium and reworked washout deposits.	No fossils were found. **Class 3a**
"NBU #920-12G" (Sec. 12, T 9 S, R 20, E)	The proposed access road, pipeline, and well pad are staked on relatively flat ground covered with colluvium and reworked washout deposits.	No fossils were found. **Class 3a**
"NBU #920-12H" (Sec. 12, T 9 S, R 20, E)	The proposed access road, pipeline, and well pad are staked on sloping ground covered by colluvium and outcrops of purple sandstone composed of subrounded, medium grains. The purple sandstone outcrop was observed approximately 30 ft from south from the center stake, and 20 ft east of the proposed pipeline.	Fossils found in the area included isolated fragments of *Echmatemys* carapace and plastron. **Class 4a**

"NBU #920-12I" (Sec. 12, T 9 S, R 20, E)	The proposed access road, pipeline, and well pad are staked on sloping ground covered by colluvium and outcrops of purple sandstone composed of subrounded, medium grains that are approximately 20 ft south of the proposed pipeline and well pad.	Isolated fragments of turtle carapace and plastron belonging to *Echmatemys* were found around the sandstone and four highly weathered vertebrae possibly belonging to the suborder serpentes were found approximately 10 ft from the center stake. **Class 4a**
"NBU #920-12J" (Sec. 12, T 9 S, R 20, E)	The proposed access road, pipeline, and well pad are staked on sloping ground covered by colluvium and an outcrop of purple sandstone composed subrounded, medium grains. The outcrop of sandstone lies approximately 20 ft south from the proposed pipeline and well pad.	Isolated fragments of *Echmatemys* carapace and plastron were found around the sandstone. **Class 3a**
"NBU #920-12K" (Sec. 12, T 9 S, R 20, E)	The proposed access road, pipeline, and well pad are staked on sloping ground that is covered by colluvium and out crops of purple sandstone composed of subrounded, medium grains. The outcrop of sandstone lies approximately 20 ft south from the proposed pipeline and well pad.	Isolated fragments of *Echmatemys* carapace and plastron were found around the sandstone. **Class 3a**
"NBU #920-13A" (Sec. 13, T 9 S, R 20, E)	The proposed access road, pipeline, and well pad are staked on relatively flat ground covered by colluvium and purple outcrops of sandstone composed of subrounded, medium grains. The outcrops of purple sandstone were observed approximately 20 ft southeast of the central stake.	Fossils found included several fragments of *Echmatemys* that were loosely associated to each other. **Class 3a**
"NBU #920-13B" (Sec. 13, T 9 S, R 20, E)	The proposed access road, pipeline, and well pad are staked on relatively flat ground covered by colluvium and outcrops of purple sandstone composed of subrounded, medium grains. The outcrop of sandstone was observed approximately 20 ft west and 30 ft south from the well pad.	Fossils found in the area included isolated fragments of *Echmatemys* carapace and plastron. **Class 3a**
"NBU #920-13H" (Sec. 13, T 9 S, R 20, E)	The proposed access road, pipeline, and well pad are staked on flat ground that is covered by colluvium.	No fossils were found. **Class 3a**

RECOMMENDATIONS

A reconnaissance survey was conducted for Kerr McGee's proposed well pads, access roads, and pipelines for "NBU #920-12B, D, E, F, G, H, I, J & K; #920-13A, B & H" (Sec. 12 & 13, T 9 S, R 20 E) The well pads and the associated access roads and pipelines covered in this report showed some signs of vertebrate fossils, therefore, we advise the following recommendations

Due to the number of fossil vertebrates found, we recommend that a permitted paleontologist be present to monitor the construction of thee proposed access roads, pipelines, and well pads "NBU #920-12D, NBU #920-12E, and NBU #920-12I" (Sec. 12, T 9 S, R 20 E)

We further recommended that the remaining access roads, pipelines and well pads covered in this report have no paleontological restriction placed on them during construction. However, buried pipeline will encounter Uinta formational sediments along most of the staked pipeline corridors and care should be taken to report any vertebrate fossils which are disturbed.

Nevertheless, if any vertebrate fossil(s) are found during construction within the project area, recommendations are that a paleontologist is immediately notified in order to collect fossil materials in danger of being destroyed. Any vertebrate fossils found should be carefully moved outside of the construction areas to be check by a permitted paleontologist.

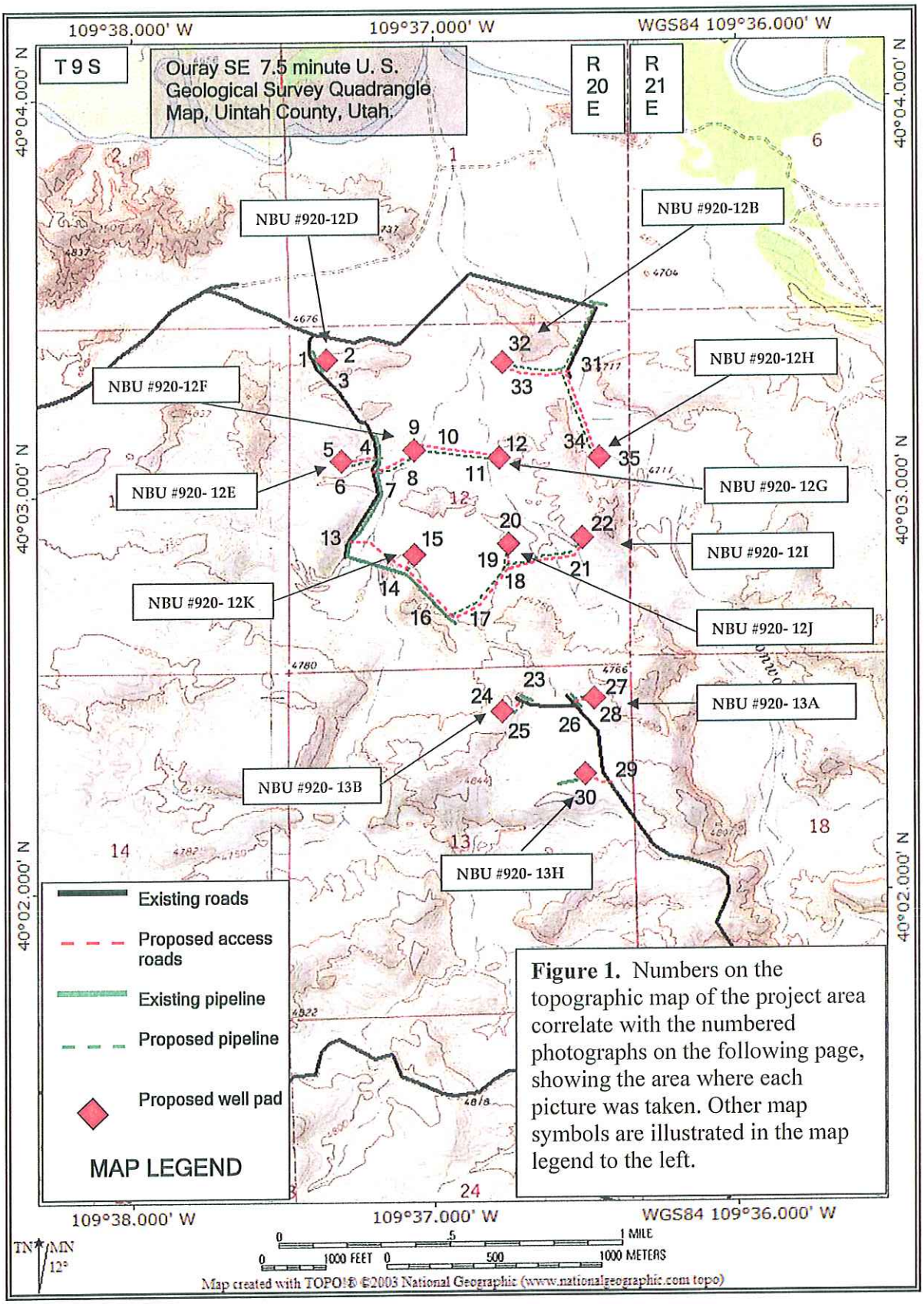

109°38.000' W
109°37.000' W
WGS84 109°36.000' W
40°04.000' N
40°03.000' N
40°02.000' N
T 9 S
R 20 E
R 21 E
Ouray SE 7.5 minute U. S. Geological Survey Quadrangle Map, Uintah County, Utah.
NBU #920-12D
NBU #920-12B
NBU #920-12H
NBU #920-12F
NBU #920- 12E
NBU #920- 12G
NBU #920- 12I
NBU #920- 12K
NBU #920- 12J
NBU #920- 13A
NBU #920- 13B
NBU #920- 13H
Existing roads
Proposed access roads
Existing pipeline
Proposed pipeline
Proposed well pad
MAP LEGEND
Figure 1. Numbers on the topographic map of the project area correlate with the numbered photographs on the following page, showing the area where each picture was taken. Other map symbols are illustrated in the map legend to the left.
TN
MN
12°
1 MILE
1000 FEET
500
1000 METERS
Map created with TOPO!® ©2003 National Geographic (www.nationalgeographic.com topo)

Figure 1. *continued...*

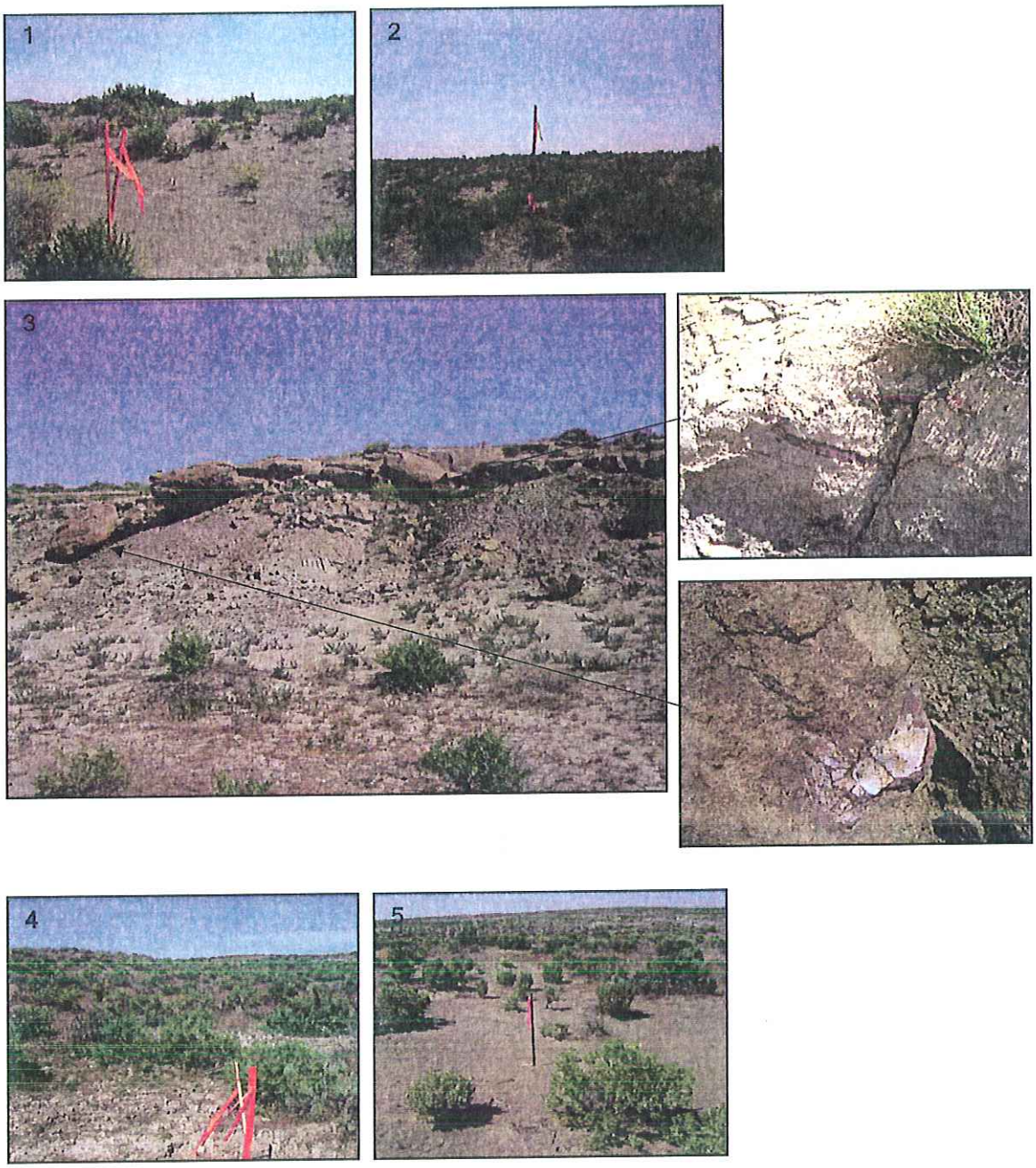


Figure 1. *continued...*

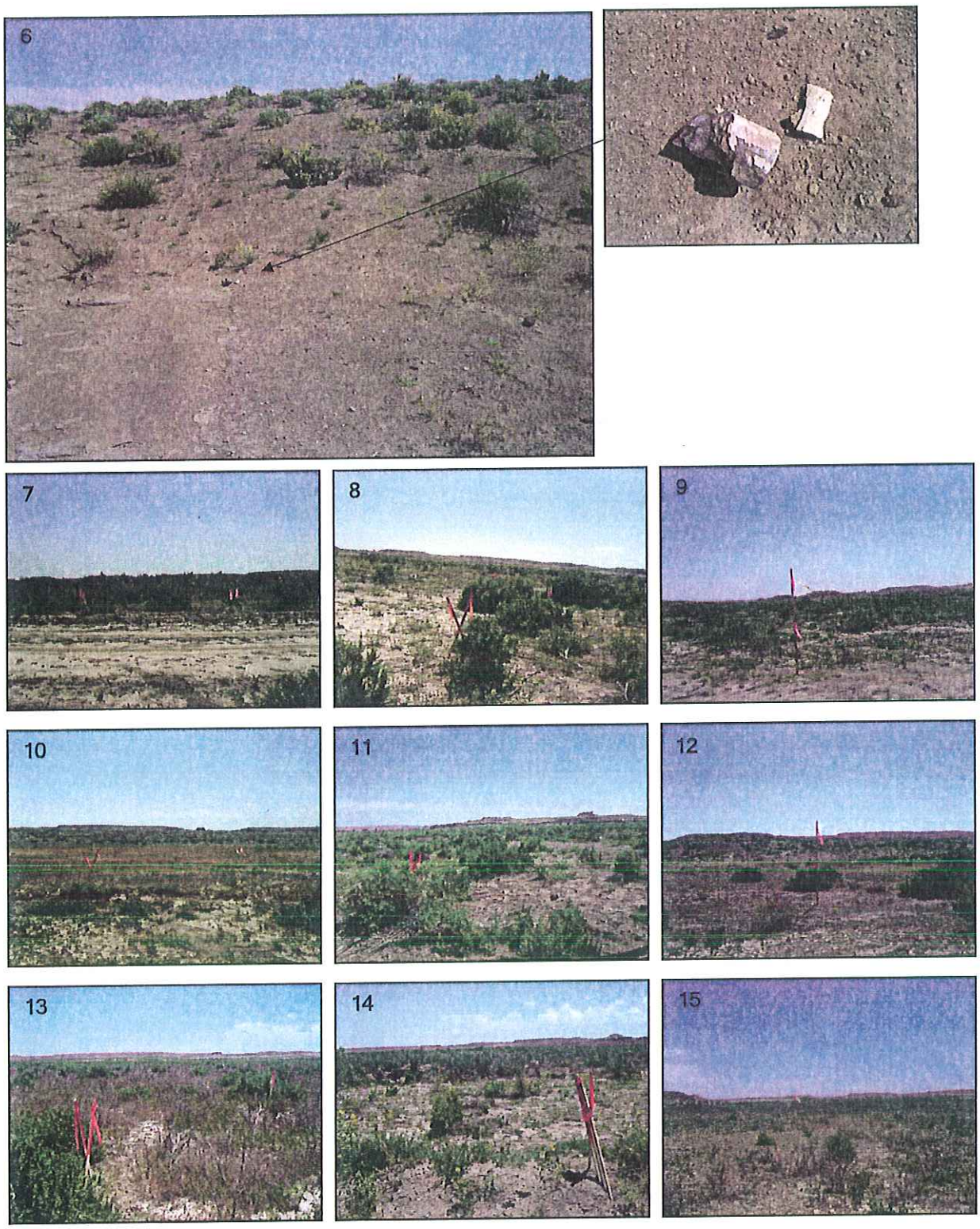


Figure 1. *continued...*

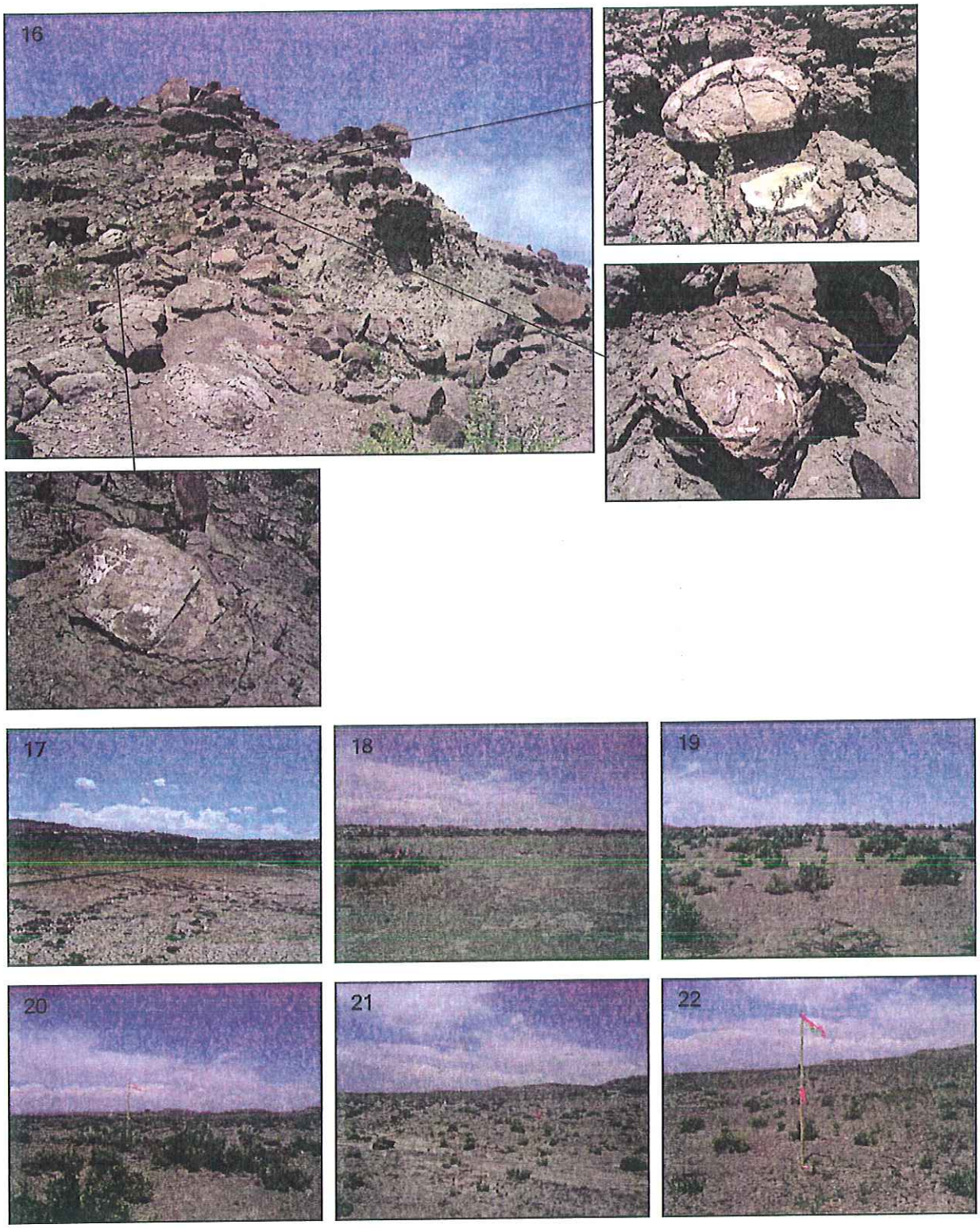


Figure 1. *continued...*

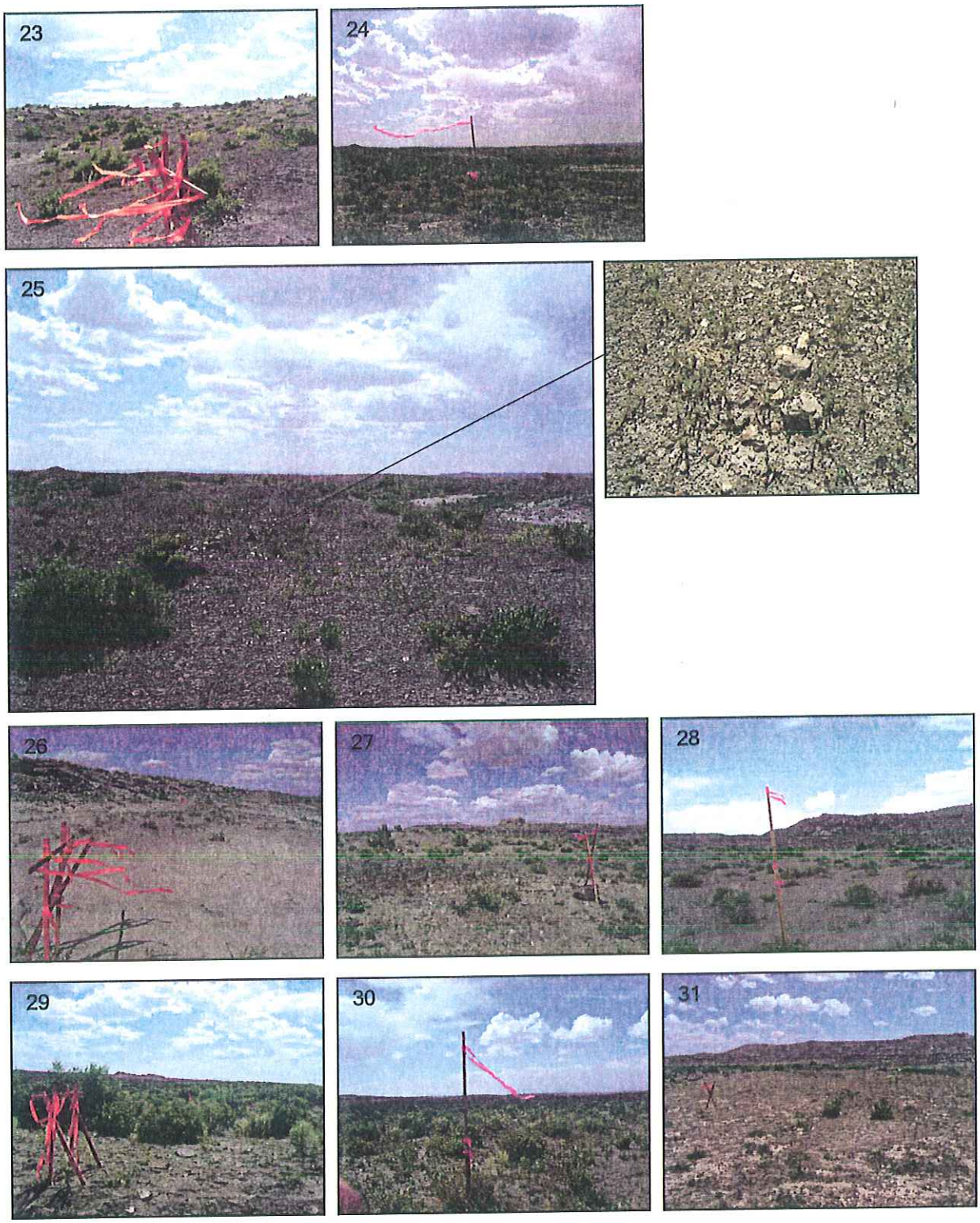
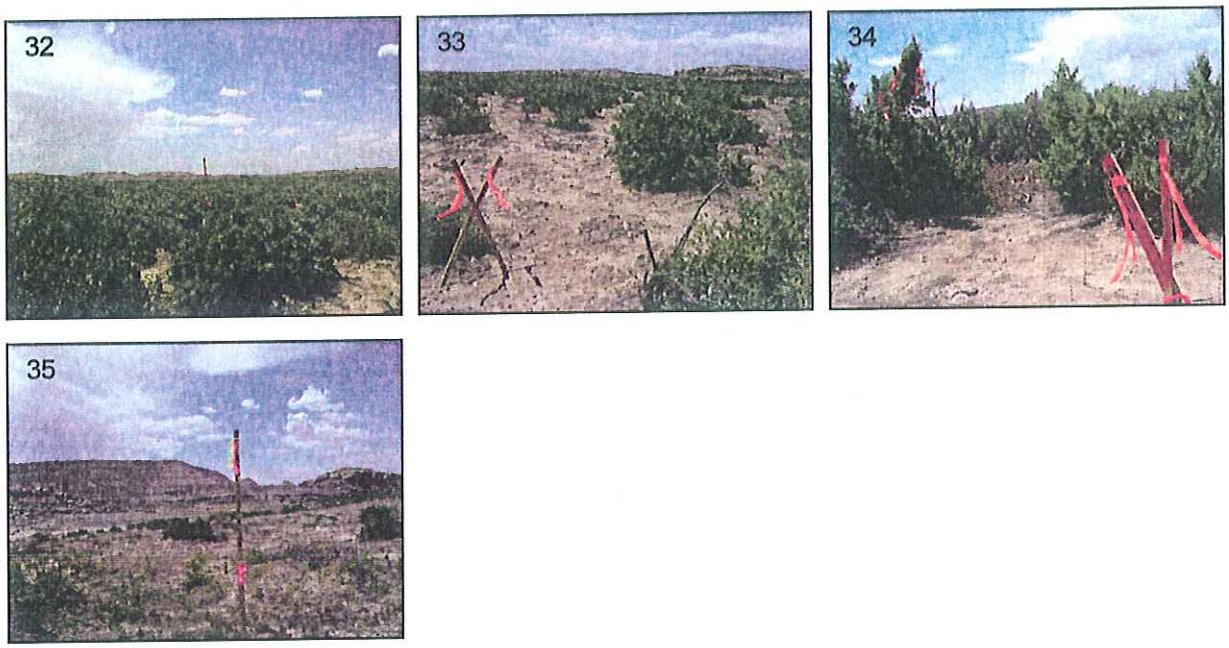


Figure 1. *continued...*



REFERENCES CITED

Abbott, W., 1957, Tertiary of the Uinta Basin: Intermountain Assoc. Petroleum Geologists Guidebook, Eighth Ann. Field Conf., p. 102-109.

Anderson, D. W., and Picard, M. D., 1972, Stratigraphy of the Duchesne River Formation (Eocene-Oligocene?), northern Uinta Basin, northeastern Utah: Utah Geological and Mineralogical Survey Bulletin 97, p. 1-28.

Betts, C. W., 1871, The Yale College expedition of 1870: Harper's New Monthly Magazine, v. 43, p. 663-671.

Black, C. C. and Dawson, M. R., 1966, A Review of Late Eocene Mammalian Faunas from North America: American Journal of Science, v. 264, p. 321-349.

Bryant, B., Naeser C. W., Marvin R. F., Mahnert H. H., 1989, Cretaceous and Paleogene Sedimentary Rocks and Isotopic Ages of Paleogene Tuffs,Uinta basin, Utah. And Ages of Late Paleogene and Neogene Tuffs and the Beginning of Rapid Regional Extension, Eastern Boundary of the Basin and Range Province near Salt lake City, Utah: In: Evolution of Sedimentary basins-Uinta and Piceance Basins. U. S. Geological Survey Bulletin 1787-J, K.

Flynn, J. J., 1986, Correlation and geochronology of middle Eocene strata from the western United States: Palaeogeographic, Palaeoclimatology, Palaeoecology, v. 55, p. 335-406.

Hamblin, A. H. and Miller, W. E., 1987, Paleogeography and Paleoecology of the Myton Pocket, Uinta Basin, Utah (Uinta Formation-Upper Eocene): Brigham Young University Geology Studies, v. 34, p 33-60.

Kay, J. L., 1934, Tertiary formations of the Uinta Basin, Utah: Annals of Carnegie Museum, v. 23, p. 357-371.

Marsell, R. E., 1964, Geomorphology of the Uinta Basin-A Brief Sketch: Thirteenth annual Field Conference. Association of Petroleum Geologists, p. 34-46.

Marsh, O. C., 1871, on the geology of the Eastern Uintah Mountains: American Journal of Science and Arts, v. 1, p. 1-8.

_____ 1875a, Ancient lake basins of the Rocky Mountain region: American Journal of Science and Arts, v. 9, p. 49-52.

_____ 1875b, Notice of new Tertiary mammals, IV: American Journal of Science and Arts, Third Series, v. 9, p. 239-250.

Osborn, H. F., 1895, Fossil mammals of the Uinta beds, expedition of 1894: American Museum of Natural History Bulletin, v. 7, p. 71-106.

_____ 1929, The Titanotheres of Ancient Wyoming, Dakota and Nebraska: Monograph of the U. S. Geological Survey, v. 55, p. 1-953.

Peterson, O. A., 1931c, new species from the Oligocene of the Uinta: Annals of Carnegie Museum, v. 21, p. 61-78.

Peterson, O. A. and Kay, J. L., 1931, The Upper Uinta Formation of Northeastern Utah: Annals of the Carnegie Museum, v. 20, p. 293-306.

Prothero, D. R., 1996, Magnetic Stratigraphy and biostratigraphy of the middle Eocene Uinta Formation, Uinta Basin, Utah, *in* Prothero, D. R., and Emry, R. J. editors, The Terrestrial Eocene-Oligocene Transition in North America, p. 3-24.

Rasmussen, D. T., Conroy, G. C., Friscia, A. R., Townsend, K. E. and Kinkel, M. D., 1999, Mammals of the middle Eocene Uinta Formation: Vertebrate Paleontology of Utah, p. 401-420.

Riggs, E. S., 1912. New or Little Known Titanotheres from the Lower Uintah Formations: Field Museum of Natural History Geological Series, v. 159, p. 17-41.

Ryder, R. T., Fouch, T. D., Elison, J. H., 1976, Early Tertiary sedimentation in the western Uinta Basin, Utah: Geological Society of America Bulletin v. 87, p. 496-512.

Scott, W. B., 1945, The Mammalia of the Duchesne River Oligocene: Transactions of the American Philosophical Society, v. 34, p. 209-253.

Stucky, R. K., 1992, Mammalian faunas in North America of Bridgerian to early Arikareean "age" (Eocene and Oligocene), in Prothero, D. R., and Berggren, W. A., eds., Eocene-Oligocene climatic and biotic evolution: Princeton University Press, p. 464-493.

Wood, H. E., 1934, Revision of the Hyrachyidaes: American Museum of Natural History Bulletin, v. 67, p. 181-295.

_____ and others, 1941, Nomenclature and Correlation of the North America Continental Tertiary: Geol. Soc. Amer. Bull., v. 52, no. 1, Jan. 1, p. 1-48. 52, no. 1, Jan. 1, p. 1-48.

API Well No: 43047501250000

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:
3160
(UT-922)

September 17, 2008

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2008 Plan of Development Natural Buttes Unit Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2008 within the Natural Buttes Unit, Uintah County, Utah.

```
   API #      WELL NAME                LOCATION

(Proposed PZ MESA VERDE)

43-047-50126 NBU 920-12I Sec 12 T09S R20E 2076 FSL 0799 FEL
43-047-50125 NBU 920-12J Sec 12 T09S R20E 2014 FSL 1926 FEL

(Proposed PZ WASATCH-MESA VERDE)

43-047-50099 NBU 921-27P3 Sec 27 T09S R21E 1384 FSL 1270 FEL
                     BHL Sec 27 T09S R21E 0645 FSL 1250 FEL

43-047-50124 NBU 920-12K  Sec 12 T09S R20E 1913 FSL 2179 FWL
43-047-50123 NBU 920-12N  Sec 12 T09S R20E 0460 FSL 1726 FWL
```

This office has no objection to permitting the wells at this time.

/s/ Michael L. Coulthard

bcc: File – Natural Buttes Unit
Division of Oil Gas and Mining
Central Files
Agr. Sec. Chron
Fluid Chron

API Well No: 43047501250000

MCoulthard:mc:9-17-08

API Number: 4304750125

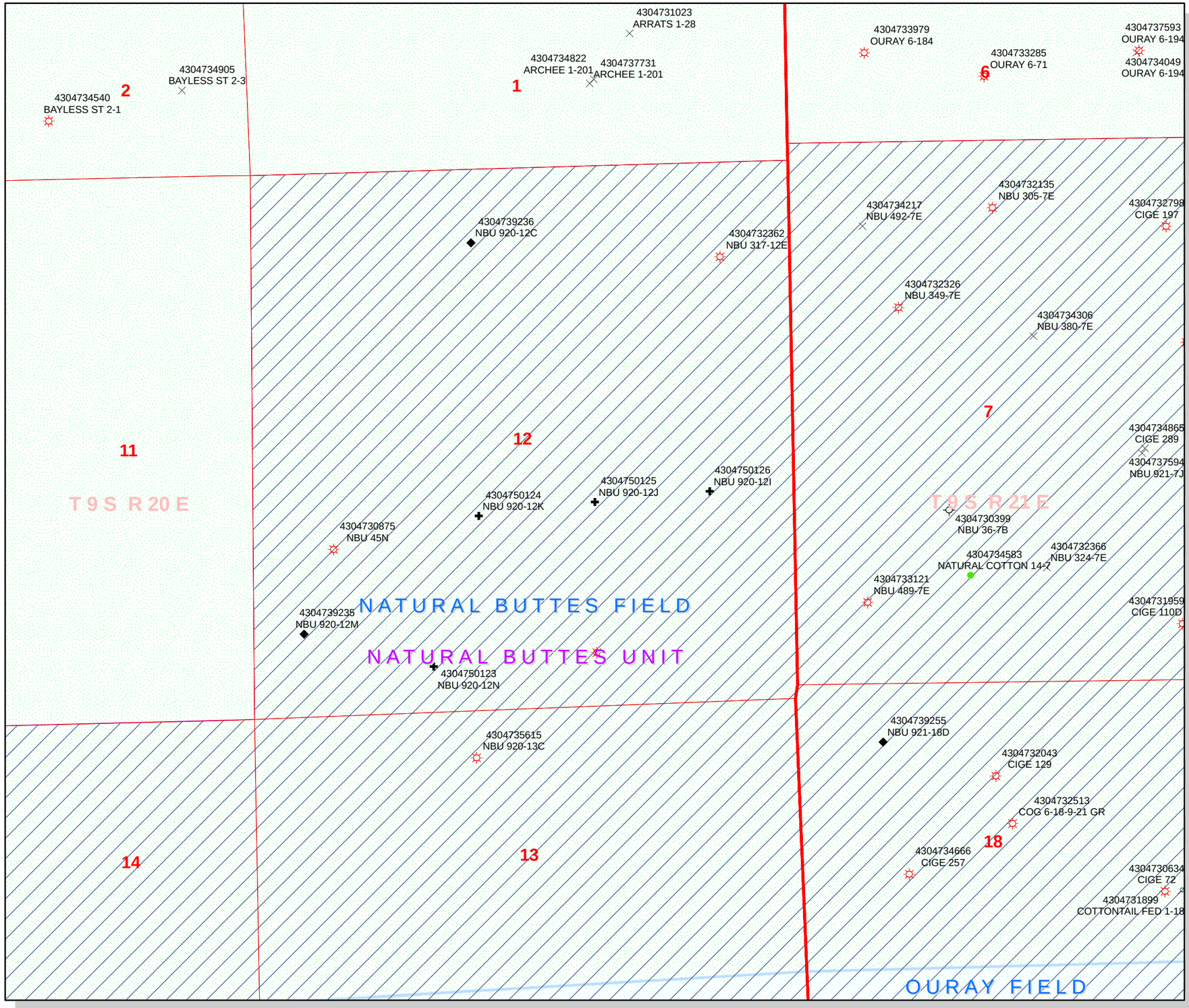
Well Name: NBU 920-12J

Township 09.0 S Range 20.0 E Section 12

Meridian: SLBM

Operator: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Map Prepared:
Map Produced by Diana Mason



Units

STATUS

- ACTIVE
- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

Fields

STATUS

- ACTIVE
- COMBINED
- Sections
- Township

Wells Query Events

- <all other values>

GIS_STAT_TYPE

- <Null>
- APD
- DRL
- GI
- GS
- LA
- NEW
- OPS
- PA
- PGW
- POW
- RET
- SGW
- SOW
- TA
- TW
- WD
- WI
- WS
- Bottom Hole Location

1,300 650 0 1,300 Feet

1:12,000

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 9/12/2008 **API NO. ASSIGNED:** 43047501250000

WELL NAME: NBU 920-12J

OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P. (N2995) **PHONE NUMBER:** 720 929-6226

CONTACT: Kevin McIntyre

PROPOSED LOCATION: NWSE 12 090S 200E **Permit Tech Review:** ☑

SURFACE: 2014 FSL 1926 FEL **Engineering Review:** ☐

BOTTOM: 2014 FSL 1926 FEL **Geology Review:** ☑

COUNTY: UINTAH

LATITUDE: 40.04832 **LONGITUDE:** -109.61215

UTM SURF EASTINGS: 618388.00 **NORTHINGS:** 4433832.00

FIELD NAME: NATURAL BUTTES

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-0144868B **PROPOSED FORMATION:** MVRD

SURFACE OWNER: 2 - Indian **COALBED METHANE:** NO

RECEIVED AND/OR REVIEWED:

- ☑ **PLAT**
- ☑ **Bond:** FEDERAL - WYB000291
- ☐ **Potash**
- ☑ **Oil Shale 190-5**
- ☐ **Oil Shale 190-3**
- ☐ **Oil Shale 190-13**
- ☑ **Water Permit:** Permit #43-8496
- ☐ **RDCC Review:**
- ☐ **Fee Surface Agreement**
- ☐ **Intent to Commingle**

LOCATION AND SITING:

- ☐ **R649-2-3.**

  Unit: NATURAL BUTTES
- ☐ **R649-3-2. General**
- ☐ **R649-3-3. Exception**
- ☑ **Drilling Unit**

  Board Cause No: 173-14

  Effective Date: 12/2/1999

  Siting: 460' fr u bdry & uncomm. tract
- ☐ **R649-3-11. Directional Drill**

Comments: Presite Completed

Stipulations: 4 - Federal Approval - dmason
17 - Oil Shale 190-5(b) - dmason

JON M. HUNTSMAN, JR.
Governor
GARY R. HERBERT
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
MICHAEL R. STYLER
Executive Director
Division of Oil, Gas and Mining
JOHN R. BAZA
Division Director

Permit To Drill

****

Well Name: NBU 920-12J
API Well Number: 43047501250000
Lease Number: UTU-0144868B
Surface Owner: INDIAN
Approval Date: 9/25/2008

Issued to:
KERR-MCGEE OIL & GAS ONSHORE, L.P. , P.O. Box 173779, Denver, CO 80217

Authority:
Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of CAUSE: 173-14.

Duration:
This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

General:
Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:
State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with the Order in Cause No. 190-5(b) dated October 28, 1982, the operator shall comply with the requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operators shall ensure that the surface and or production casing is properly cemented over the entire oil shale section as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the division.

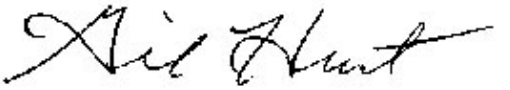
Notification Requirements:
Notify the Division with 24 hours of spudding the well.
- Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.
- Contact Dustin Doucet at (801) 538-5281 office (801) 733-0983 home

API Well No: 43047501250000

Reporting Requirements:
All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

Approved By:



Gil Hunt
Associate Director, Oil & Gas

API Well No: 43047501250000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0144868B

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 920-12J

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047501250000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6007 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 2014 FSL 1926 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWSE Section: 12 Township: 09.0S Range: 20.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 9/22/2009	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DRILLING REPORT Report Date:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	✓ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requests an extension to this APD for the maximum time allowed. Please contact the undersigned with any questions and/or comments. Thank you.

Approved by the Utah Division of Oil, Gas and Mining

Date: September 23, 2009

By: Dustin Doucet

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Danielle Piernot	720 929-6156	Regulatory Analyst
SIGNATURE N/A		**DATE** 9/17/2009

RECEIVED September 17, 2009

The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047501250000

API: 43047501250000
Well Name: NBU 920-12J
Location: 2014 FSL 1926 FEL QTR NWSE SEC 12 TWNP 090S RNG 200E MER S
Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.
Date Original Permit Issued: 9/29/2008

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- **If located on private land, has the ownership changed, if so, has the surface agreement been updated?** ○ Yes ◉ No
- **Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?** ○ Yes ◉ No
- **Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?** ○ Yes ◉ No
- **Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?** ○ Yes ◉ No
- **Has the approved source of water for drilling changed?** ○ Yes ◉ No
- **Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?** ○ Yes ◉ No
- **Is bonding still in place, which covers this proposed well?** ◉ Yes ○ No

Approved by the Utah Division of Oil, Gas and Mining

Signature: Danielle Piernot **Date:** 9/17/2009
Title: Regulatory Analyst **Representing:** KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date: September 23, 2009
By: [signature]

RECEIVED September 17, 2009

API Well No: 43047501250000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0144868B

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 920-12J

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047501250000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779 **PHONE NUMBER:** 720 929-6007 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 2014 FSL 1926 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWSE Section: 12 Township: 09.0S Range: 20.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 9/30/2010	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ SPUD REPORT Date of Spud:	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	✓ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requests an extension to this APD for the maximum time allowed. Please contact the undersigned with any questions and/or comments. Thank you.

Approved by the Utah Division of Oil, Gas and Mining

Date: October 06, 2010

By: Dustin Doucet

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Danielle Piernot	720 929-6156	Regulatory Analyst
SIGNATURE N/A		**DATE** 9/29/2010

RECEIVED September 29, 2010

The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047501250000

API: 43047501250000
Well Name: NBU 920-12J
Location: 2014 FSL 1926 FEL QTR NWSE SEC 12 TWNP 090S RNG 200E MER S
Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.
Date Original Permit Issued: 9/29/2008

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- **If located on private land, has the ownership changed, if so, has the surface agreement been updated?** ○ **Yes** ◉ **No**
- **Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?** ○ **Yes** ◉ **No**
- **Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?** ○ **Yes** ◉ **No**
- **Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?** ○ **Yes** ◉ **No**
- **Has the approved source of water for drilling changed?** ○ **Yes** ◉ **No**
- **Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?** ○ **Yes** ◉ **No**
- **Is bonding still in place, which covers this proposed well?** ◉ **Yes** ○ **No**

Approved by the Utah Division of Oil, Gas and Mining

Signature: Danielle Piernot **Date:** 9/29/2010
Title: Regulatory Analyst **Representing:** KERR-MCGEE OIL & GAS ONSHORE, LP

Date: October 06, 2010

By:

RECEIVED September 29, 2010

API Well No: 43047501250000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0144868B

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 920-12J

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047501250000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779 **PHONE NUMBER:** 720 929-6007 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 2014 FSL 1926 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWSE Section: 12 Township: 09.0S Range: 20.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 11/4/2010	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	✓ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DRILLING REPORT Report Date:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Kerr-McGee Oil & Gas Onshore LP (Kerr-McGee) respectfully requests to change the surface casing size for this well from FROM: 9-5/8" TO: 8-5/8". Additionally, Kerr-McGee requests to change the surface hole size FROM: 12-1/4" TO: 11". Please see the attached drilling program for additional details. All other information remains the same. Please contact the undersigned with any questions and/or comments. Thank you.

Accepted by the Utah Division of Oil, Gas and Mining

Date: October 28, 2010

By:

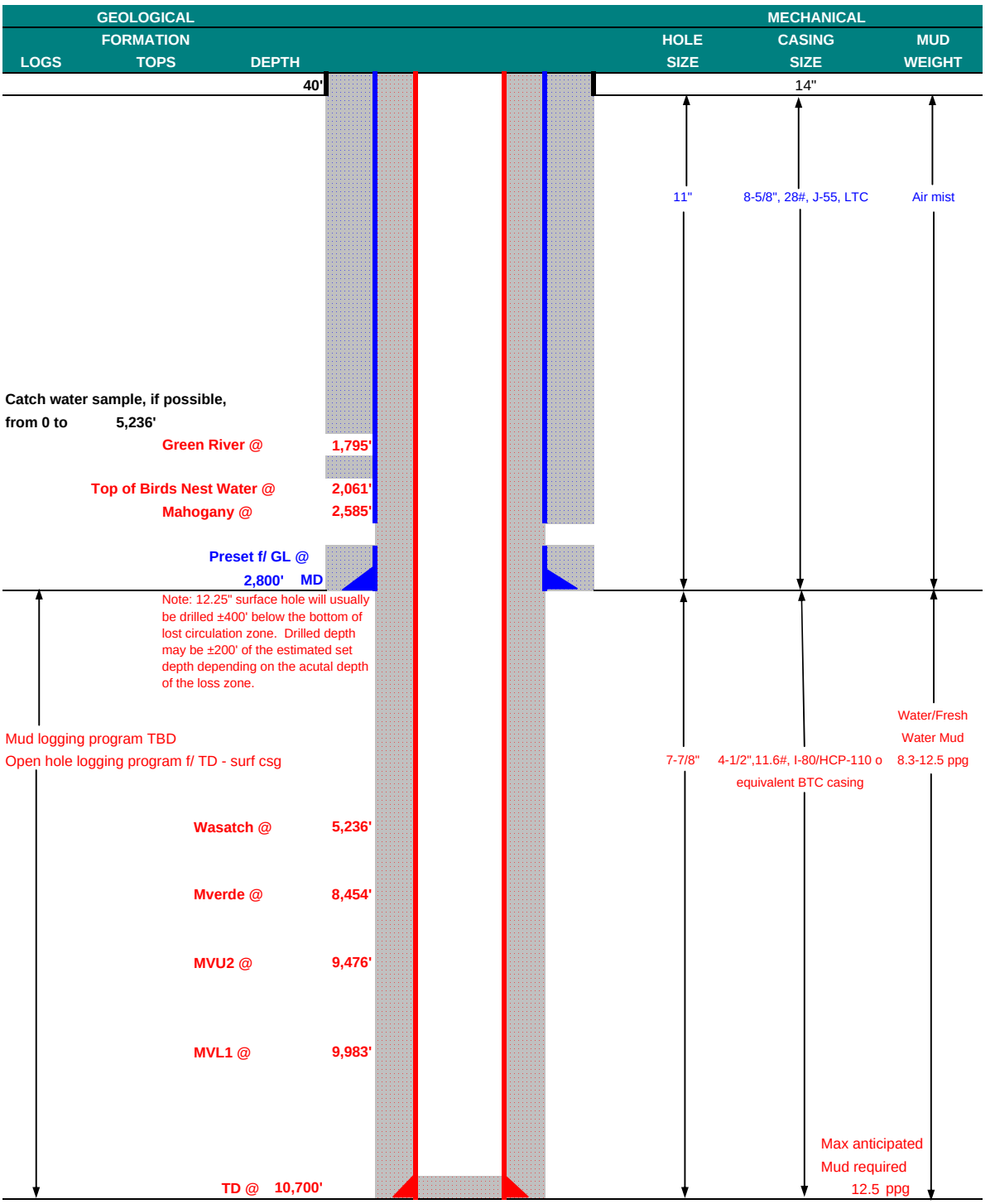
NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Danielle Piernot	720 929-6156	Regulatory Analyst
SIGNATURE		**DATE**
N/A		10/27/2010

RECEIVED October 27, 2010

KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP			DATE	September 11, 2008		
WELL NAME	**NBU 920-12J**			TD	10,700' MD/TVD		
FIELD	Natural Buttes	COUNTY	Uintah	STATE	Utah	ELEVATION	4,701' GL KB 4,716'
SURFACE LOCATION	NWSE 2014' FSL & 1926' FEL					BHL	Straight Hole
	Latitude: 40.048370	Longitude:	-109.612150	NAD 27			
OBJECTIVE ZONE(S)	Mesaverde						
ADDITIONAL INFO	Regulatory Agencies: BLM (MINERALS), BIA (SURFACE), UDOGM, Tri-County Health Dept.						



KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL			WT.	GR.	CPLG.	DESIGN FACTORS BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'								
								3520	2020	453000
SURFACE	9-5/8"	0	to	2,800'	36.00	J-55	LTC	0.77	1.54	5.13
								7780	6350	201000
PRODUCTION	4-1/2"	0	to	9650	11.60	I-80	BTC	1.69	1.01	1.86
								10690	8650	367000
	4-1/2"	0	to	10700	11.60	HCP-110	BTC	2.32	1.24	3.39

1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point)

2) MASP (Prod Casing) = Pore Pressure at TD - (.22 psi/ft-partial evac gradient x TD)

(Burst Assumptions: TD = 12.5 ppg) .22 psi/ft = gradient for partially evac wellbore

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

MASP 4280 psi

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500	Premium cmt + 2% CaCl	215	60%	15.60	1.18
Option 1			+ .25 pps flocele				
	TOP OUT CMT (1)	250	20 gals sodium silicate + Premium cmt	100		15.60	1.18
			+ 2% CaCl + .25 pps flocele				
	TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
SURFACE		**NOTE: If well will circulate water to surface, option 2 will be utilized**					
Option 2	LEAD	2000	Prem cmt + 16% Gel + 10 pps gilsonite	230	35%	11.00	3.82
			+.25 pps Flocele + 3% salt BWOC				
	TAIL	500	Premium cmt + 2% CaCl	180	35%	15.60	1.18
			+ .25 pps flocele				
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION	LEAD	4,730'	Premium Lite II + 3% KCl + 0.25 pps	520	60%	12.50	3.38
			celloflake + 5 pps gilsonite + 10% gel				
			+ 0.5% extender				
	TAIL	5,970'	50/50 Poz/G + 10% salt + 2% gel	1670	60%	14.30	1.31
			+.1% R-3				

*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

*Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.
PRODUCTION	Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint to top of tail cement with bow spring centralizers.

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. Test to 5,000 psi (annular to 2,500 psi) prior to drilling out. Record on chart recorder & tour sheet. Function test rams on each trip. Maintain safety valve & inside BOP on rig floor at all times. Kelly to be equipped with upper & lower kelly valves.

Drop Totco surveys every 2000'. Maximum allowable hole angle is 5 degrees.

Most rigs have PVT Systems for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER: _____ **DATE:** _____

Emile Goodwin

DRILLING SUPERINTENDENT: _____ **DATE:** _____

John Merkel

Form 3160-3
(August 2007)

FORM APPROVED
OMB NO. 1004-0137
Expires: July 31, 2010

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.: UTU 0144868B
6. If Indian, Allottee or Tribe Name: Ute Tribe
7. If Unit or CA Agreement, Name and No.: 891008900A
8. Lease Name and Well No.: NBU 920-12J
9. API Well No.: 43-047-50125
10. Field and Pool, or Exploratory: Natural Buttes Field

1a. Type of Work: [X] DRILL [ ] REENTER

1b. Type of Well: [ ] Oil Well [X] Gas Well [ ] Other [ ] Single Zone [X] Multiple Zone

2. Name of Operator: Kerr-McGee Oil & Gas Onshore, LP

3a. Address: PO Box 173779, Denver, CO 80217-3779

3b. Phone No. *(include area code)*: Danielle Piernot 720-929-6156

4. Location of well *(Report location clearly and In accordance with any State requirements.*)* NAD 83
At surface: 2,014' FSL 1,926' FEL NW/4 SE/4 Lat. 40.04834 Long. -109.61284
At proposed prod. zone

11. Sec.,T.,R.,M.,or Blk.and Survey or Area: 12 T 9S R 20E S.L.B.&M.

14. Distance in miles and direction from the nearest town or post office*: Approximately 8 miles southeast of Ouray, Utah

12. County or Parish: Uintah

13. State: Utah

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. unit line, if any): 1,926'

16. No. of acres in lease: 600.00

17. Spacing Unit dedicated to this well: Unit well

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.: ±1,000'

19. Proposed Depth: 10,700'

20. BLM/ BIA Bond No. on file: RLB0005242

21. Elevations (Show whether DF. RT, GR, etc.): 4,701.0 ' Ungraded Ground Level KB

22. Aproximate date work will start*: October 4, 2010

23. Estimated duration: 60-90 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1 shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by existing bond on file(see item 20 above).
5. Operator certification.
6. Such other site specific information and/ or plans as may be required by the a authorized officer.

25. Signature: Danielle Piernot — Name *(Printed/ Typed)*: Danielle Piernot — Date: August 9, 2010

Title: Regulatory Analyst I

E-mail: danielle.piernot@anadarko.com

Phone: 720-929-6156

Approved By *(Signature)* — Name *(Printed/ Typed)*: James H. Sparger — Date: AUG 27 2010

Title: Acting Assistant Field Manager Lands & Mineral Resources — Office: VERNAL FIELD OFFICE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

9/14/10

* *(Instructions on page 2)*

RECEIVED
NOV 17 2010
BLM VERNAL, UTAH

NOTICE OF APPROVAL

UDOGM

DIV. OF OIL, GAS & MINING

CONDITIONS OF APPROVAL ATTACHED

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VERNAL FIELD OFFICE
170 South 500 East VERNAL, UT 84078 (435) 781-4400

CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company:	**Kerr McGee Oil & Gas Onshore LP**	**Location:**	**NWSE, Sec. 12, T9S R20E**
Well No:	**NBU 920-12J**	**Lease No:**	**UTU-0144868B**
API No:	**43-047-50125**	**Agreement:**	**Natural Buttes**

OFFICE NUMBER: (435) 781-4400

OFFICE FAX NUMBER: (435) 781-3420

A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

NOTIFICATION REQUIREMENTS

Construction Activity (Notify Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist)	-	The Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist shall be notified at least 48 hours in advance of any construction activity. The Ute Tribal office is open Monday through Thursday.
Construction Completion (Notify Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist)	-	Upon completion of the pertinent APD/ROW construction, notify the Ute Tribe Energy & Minerals Dept. for a Tribal Technician to verify the Affidavit of Completion. Notify the BLM Environmental Scientist prior to moving on the drilling rig.
Spud Notice (Notify BLM Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify BLM Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings to: ut_vn_opreport@blm.gov.
BOP & Related Equipment Tests (Notify BLM Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify BLM Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

SURFACE USE PROGRAM
CONDITIONS OF APPROVAL (COAs)

Site-Specific Conditions of Approval:

Paint New facilities "shadow gray."

Use pit run/gravel for well pad/access road support.

Monitor location by a permitted archaeologist during construction. Erect a temporary fence around the boundary of the site 42Un6823 to facilitate avoidance.

Construct a low-water crossing on the access road at drainage.

If the gathering line would be installed aboveground, follow the procedures specified in the BLM's Hydraulic Consideration for Pipeline Crossing of Stream Channels (BLM, 2003).

In accordance with the guidelines specified in the Utah BLM Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances, 2002 (See Appendix D), a raptor survey should be conducted prior to construction of the proposed location, pipeline, or access road if construction would take place during raptor nesting season (January 01 through September 30) and conduct its operations according to specification in the guidelines.

If project construction operations are scheduled to occur after June 8, 2010, KMG will conduct additional biological surveys in accordance with the guidelines specified in the USFWS Rare Plant Conservation Measures for Uinta Basin hookless cactus (See Appendix D) and conduct its operation according to its specifications.

BIA Standard Conditions of Approval:
Soil erosion will be mitigated by reseeding all disturbed areas.

The gathering pipelines will be constructed to lie on the surface. The surface pipelines will not be bladed or cleared of vegetation. Where pipelines are constructed parallel to roads they may be welded on the road and then lifted from the road onto the right-of-way. Where pipelines do not parallel roads but cross-country between sites, they shall be welded in place at well sites or on access roads and then pulled between stations with a suitable piece of equipment. Traffic will be restricted along these areas so that the pipeline right-of-way will not be used as an access road.

An open drilling system shall be used, unless otherwise specified in 10.0 Additional Stipulations of this document and in the Application for Permit to Drill. A closed drilling system shall be used in all flood plain areas, and other highly sensitive areas, recommended by the Ute Tribe Technician, BIA, and other agencies involved.

The reserve pit shall be lined with a synthetic leak proof liner. After the drilling operation is complete, excess fluids shall be removed from the reserve pit and either hauled to an approved disposal site or shall be used to drill other wells. When the fluids are removed the pit shall be backfilled a minimum of 3.0' below the soil surface elevation.

A closed production system shall be used. This means all produced water and oil field fluid wastes shall be contained in leak proof tanks. These fluids shall be disposed of in either approved injection wells or disposal pits.

Major low water crossings will be armored with pit run material to protect them from erosion.

All personnel should refrain from collecting any paleontological fossils and from disturbing any fossil resources in the area.

If fossils are exposed or identified during construction, all construction must cease and immediate notification to the Energy and Minerals Department and the Cultural Rights Protection Officer.

Before the site is abandoned the company will be required to restore the right-of-way to near its original state. The disturbed area will be reseeded with desirable perennial vegetation. If necessary, the Bureau of Indian Affairs or Bureau of Land Management will provide a suitable seed mixture.

Noxious weeds will be controlled on all surface disturbances within the project area. If noxious weeds spread from the project area onto adjoining land, the company will also be responsible for their control.

If project construction operations are scheduled to occur after December 31, 2009, KMG should conduct annual raptor surveys in accordance with the guidelines specified in the Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances, 2002 (See Appendix E) and conduct its operations according to applicable seasonal restrictions and spatial offsets.

USFWS threatened and endangered plant and animal conservation measures will be followed, as appropriate to the species identified by the biological resource survey (See Appendix E).

All personnel should refrain from collecting artifacts and from disturbing any significant cultural resources in the area.

If artifacts or any culturally sensitive materials are exposed or identified during construction, all construction must cease and immediate notification to the Energy and Minerals Department and the Cultural Rights Protection Officer.

DOWNHOLE PROGRAM
CONDITIONS OF APPROVAL (COAs)

SITE SPECIFIC DOWNHOLE COAs:

- Variances granted for air drilling operations as defined in the SOP
- Kerr McGee and their contractors shall strictly adhere to all operating practices in the SOP (approved July 28, 2008) along with all Oil and Gas rules and requirements listed in the Code of Federal Regulations and all Federal Onshore Oil and Gas Orders except where variances have been granted.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.

- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.

- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.

- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.

- **Please submit an electronic copy of all other logs run on this well in LAS format to UT_VN_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**

- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.

- In accordance with 43 CFR 3162.4-3, this well shall be reported on the "Monthly Report of Operations" (Oil and Gas Operations Report ((OGOR)) starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 (303) 231-3650 for reporting information.

- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:

    - Operator name, address, and telephone number.
    - Well name and number.
    - Well location (¼¼, Sec., Twn, Rng, and P.M.).
    - Date well was placed in a producing status (date of first production for which royalty will be paid).
    - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
    - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
    - Unit agreement and/or participating area name and number, if applicable.
    - Communitization agreement number, if applicable.

- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.

- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.

- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or

data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.

- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.

- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.

- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.

- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.

- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.

- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

SUBMIT AS EMAIL | Print Form

BLM - Vernal Field Office - Notification Form

Operator KERR-McGEE OIL & GAS Rig Name/# BUCKET RIG
Submitted By ANDY LYTLE Phone Number 720.929.6100
Well Name/Number NBU 920-12J
Qtr/Qtr NWSE Section 12 Township 9S Range 20E
Lease Serial Number UTU-0144868B
API Number 4304750125

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time 11/24/2010 14:00 HRS AM ☐ PM ☐

Casing – Please report time casing run starts, not cementing times.

- ☑ Surface Casing
- ☐ Intermediate Casing
- ☐ Production Casing
- ☐ Liner
- ☐ Other

RECEIVED
NOV 2 2 2010
DIV. OF OIL, GAS & MINING

Date/Time 12/17/2010 00:00 HRS AM ☐ PM ☐

BOPE

- ☐ Initial BOPE test at surface casing point
- ☐ BOPE test at intermediate casing point
- ☐ 30 day BOPE test
- ☐ Other

Date/Time _____ _____ AM ☐ PM ☐

Remarks ESTIMATED DATE AND TIME. PLEASE CONTACT KENNY GATHINGS AT 435.781.7048 OR LOVEL YOUNG AT 435.828.0986

API Well No: 43047501250000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0144868B

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 920-12J

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047501250000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6007 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 2014 FSL 1926 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWSE Section: 12 Township: 09.0S Range: 20.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
✓ SPUD REPORT Date of Spud: 11/25/2010	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DRILLING REPORT Report Date:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

MIRU PETE MARTIN BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'.
RAN 14" 36.7# SCHEDULE 10 CONDUCTOR PIPE. CMT W/ 28 SX READY MIX.
SPUD WELL LOCATION ON NOVEMBER 25, 2010 AT 11:00 HRS.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
11/29/2010

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Gina Becker	720 929-6086	Regulatory Analyst II
SIGNATURE N/A		**DATE** 11/29/2010

RECEIVED November 29, 2010

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 6

ENTITY ACTION FORM

Operator: KERR McGEE OIL & GAS ONSHORE LP

Operator Account Number: N 2995

Address: P.O. Box 173779

city DENVER

state CO zip 80217

Phone Number: (720) 929-6100

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304750144	NBU 920-13I		NESE	13	9S	20E	UINTAH
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
B	99999	2900	11/24/2010			12/14/10	

Comments: MIRU PETE MARTIN BUCKET RIG. MVRD = WSMVD
SPUD WELL LOCATION ON 11/24/2010 AT 9:30 HRS.

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304750125	NBU 920-12J		NWSE	12	9S	20E	UINTAH
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
B	99999	2900	11/25/2010			12/14/10	

Comments: MIRU PETE MARTIN BUCKET RIG. WSMVD
SPUD WELL LOCATION ON 11/25/2010 AT 11:00 HRS.

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304750124	NBU 920-12K		NESW	12	9S	20E	UINTAH
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
B	99999	2900	11/24/2010			12/14/10	

Comments: MIRU PETE MARTIN BUCKET RIG. WSMVD
SPUD WELL LOCATION ON 11/24/2010 AT 10:30 HRS.

ACTION CODES:

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

ANDY LYTLE
Name (Please Print)

Signature

REGULATORY ANALYST
Title

11/29/2010
Date

RECEIVED
NOV 29 2010
DIV. OF OIL, GAS & MINING

(5/2000)

API Well No: 43047501250000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0144868B

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 920-12J

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047501250000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6007 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 2014 FSL 1926 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWSE Section: 12 Township: 09.0S Range: 20.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 12/21/2010	☐ ACIDIZE	✓ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ SPUD REPORT Date of Spud:	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Kerr-McGee respectfully requests to change the surface casing from 8-5/8" to 9-5/8". The originally approved APD was approved for 9-5/8" but a sundry was submitted to change it to 8-5/8". Kerr-McGee requests to go back to our origainlly approved drilling plan with the 9-5/8" surface casing. Please see the attached drilling diagram for additional details. Thank you.

Accepted by the Utah Division of Oil, Gas and Mining

Date: 12/21/2010

By:

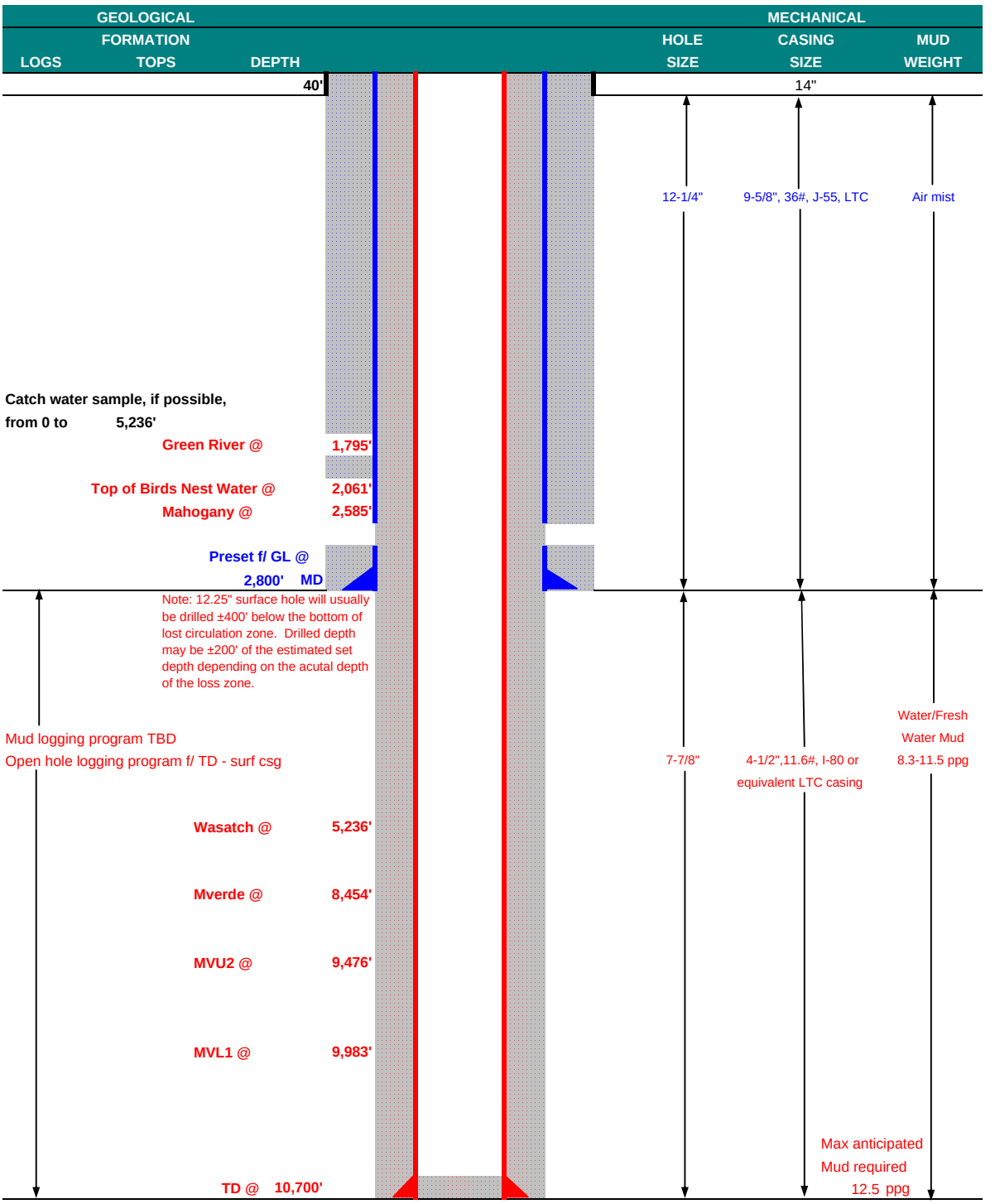
NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Danielle Piernot	720 929-6156	Regulatory Analyst
SIGNATURE		**DATE**
N/A		12/21/2010

RECEIVED December 21, 2010

KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP			DATE	September 11, 2008		
WELL NAME	**NBU 920-12J**			TD	10,700' MD/TVD		
FIELD	Natural Buttes	COUNTY	Uintah	STATE	Utah	ELEVATION	4,701' GL KB 4,716'
SURFACE LOCATION	NWSE 2014' FSL & 1926' FEL					BHL	Straight Hole
	Latitude: 40.048370	Longitude:	-109.612150	NAD 27			
OBJECTIVE ZONE(S)	Mesaverde						
ADDITIONAL INFO	Regulatory Agencies: BLM (MINERALS), BIA (SURFACE), UDOGM, Tri-County Health Dept.						



KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL			WT.	GR.	CPLG.	DESIGN FACTORS BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'								
								3520	2020	453000
SURFACE	9-5/8"	0	to	2,800'	36.00	J-55	LTC	0.77	1.54	5.13
								7780	6350	201000
PRODUCTION	4-1/2"	0	to	10700	11.60	I-80	LTC	1.69	0.91	1.86

1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point)

2) MASP (Prod Casing) = Pore Pressure at TD - (.22 psi/ft-partial evac gradient x TD)

(Burst Assumptions: TD = 12.5 ppg) .22 psi/ft = gradient for partially evac wellbore

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

MASP 4280 psi

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500	Premium cmt + 2% CaCl	215	60%	15.60	1.18
Option 1			+ .25 pps flocele				
	TOP OUT CMT (1)	250	20 gals sodium silicate + Premium cmt	100		15.60	1.18
			+ 2% CaCl + .25 pps flocele				
	TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
SURFACE		**NOTE: If well will circulate water to surface, option 2 will be utilized**					
Option 2	LEAD	2000	Prem cmt + 16% Gel + 10 pps gilsonite	230	35%	11.00	3.82
			+.25 pps Flocele + 3% salt BWOC				
	TAIL	500	Premium cmt + 2% CaCl	180	35%	15.60	1.18
			+ .25 pps flocele				
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION	LEAD	4,730'	Premium Lite II + 3% KCl + 0.25 pps	520	60%	12.50	3.38
			celloflake + 5 pps gilsonite + 10% gel				
			+ 0.5% extender				
	TAIL	5,970'	50/50 Poz/G + 10% salt + 2% gel	1670	60%	14.30	1.31
			+.1% R-3				

*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

*Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.
PRODUCTION	Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint to top of tail cement with bow spring centralizers.

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. Test to 5,000 psi (annular to 2,500 psi) prior to drilling out. Record on chart recorder & tour sheet. Function test rams on each trip. Maintain safety valve & inside BOP on rig floor at all times. Kelly to be equipped with upper & lower kelly valves.

Drop Totco surveys every 2000'. Maximum allowable hole angle is 5 degrees.

Most rigs have PVT Systems for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER: _____ **DATE:** _____

Brad Laney

DRILLING SUPERINTENDENT: _____ **DATE:** _____

Randy Bayne

API Well No: 43047501250000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0144868B

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 920-12J

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047501250000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6007 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 2014 FSL 1926 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWSE Section: 12 Township: 09.0S Range: 20.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
✓ DRILLING REPORT Report Date: 1/15/2011	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

MIRU PROPETRO #5 AIR RIG ON JANUARY 13, 2011. DRILLED 12 1/4" SURFACE HOLE TO 2780'. RAN 9 5/8" 36# IJ-55 SURFACE CSG. PUMP 10 BBLS FRESH WATER. PUMP 20 BBLS GEL WATER. LEAD CEMENT W/ 270 SX CLASS G PREM @ 11.0 PPG, 3.82 YD. TAILED CEMENT W/ 200 SX CLASS G PREM LITE @ 15.8 PPG, 1.15 YD. DROP PLUG ON THE FLY, DISPLACED W/ 170 BBLS WATER. LIFT PRESSURE 520 PSI, BUMP PLUG & HOLD 1000 PSI FOR 5 MIN. FLOAT HELD. TOP OUT W/ 100 SX CLASS G PREM LITE @ 15.8 PPG, 1.15 YD DOWN 1". CEMENT TO SURFACE. WORT.

Accepted by the Utah Division of Oil, Gas and Mining

FOR RECORD ONLY

01/18/2011

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Gina Becker	720 929-6086	Regulatory Analyst II
SIGNATURE N/A		**DATE** 1/17/2011

RECEIVED January 17, 2011

SUBMIT AS EMAIL | Print Form

BLM - Vernal Field Office - Notification Form

Operator ANADARKO Rig Name/# PIONEER 69
Submitted By DALTON KING Phone Number 435-828-0982
Well Name/Number NBU 920-12J
Qtr/Qtr NW/SE Section 12 Township 9S Range 20E
Lease Serial Number UTU0144868B
API Number 43-047-50125

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time _____ _____ AM ☐ PM ☐

Casing – Please report time casing run starts, not cementing times.

☐ Surface Casing
☐ Intermediate Casing
☐ Production Casing
☐ Liner
☐ Other

Date/Time _____ _____ AM ☐ PM ☐

BOPE

☑ Initial BOPE test at surface casing point
☐ BOPE test at intermediate casing point
☐ 30 day BOPE test
☐ Other

Date/Time 01/24/2011 06:00 AM ☑ PM ☐

Remarks TIME IS ESTIMATED

RECEIVED
JAN 2 1 2011
DIV. OF OIL, GAS & MINING

API Well No: 43047501250000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0144868B

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 920-12J

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047501250000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6515 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 2014 FSL 1926 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWSE Section: 12 Township: 09.0S Range: 20.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
✓ DRILLING REPORT Report Date: 2/6/2011	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	✓ OTHER	OTHER: RIG RELEASE

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

FINISHED DRILLING FROM 2780' TO 10,840' ON FEBRUARY 4, 2011. RAN 4 ½" 11.6# I-80 PRODUCTION CSG. PUMP 40 BBLS SPACER, LEAD CEMENT W/ 824 SX CLASS G PREM LITE @ 13.0 PPG, 1.76 YD. TAILED CEMENT W/ 1370 SX CLASS G 50/50 POZ MIX @ 14.3 PPG, 1.31 YD. DISPLACED W/ 167.7 BBLS CLAYTREAT WATER, FINAL LIFT 3330 PSI. BUMPED PLUG @ 4100 PSI, FLOATS HELD. LOST PARTIAL RETURNS 150 BBLS INTO DISPLACEMENT, 10 BBLS LEAD BACK TO PIT. EST TOP OF TAIL @ 4000'. RD CEMENTERS AND CLEANED PITS. RELEASED PIONEER RIG #69 ON FEBRUARY 6, 2011 @ 23:00 HRS.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
02/08/2011

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Gina Becker	720 929-6086	Regulatory Analyst II
SIGNATURE N/A		**DATE** 2/7/2011

RECEIVED February 07, 2011

SUBMIT AS EMAIL | Print For

BLM - Vernal Field Office - Notification Form

Operator ANADARKO Rig Name/# PIONEER 69
Submitted By BRAD PEDERSEN Phone Number 435-828-0982
Well Name/Number NBU 920-12J
Qtr/Qtr NW/NE Section 12 Township 9S Range 20E
Lease Serial Number UTU 0144868
API Number 43-047-50125

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time _____ _____ AM ☐ PM ☐

Casing – Please report time casing run starts, not cementing times.

- ☐ Surface Casing
- ☐ Intermediate Casing
- ☑ Production Casing
- ☐ Liner
- ☐ Other

Date/Time 2/5/2011 22:00 AM ☐ PM ☑

BOPE

- ☐ Initial BOPE test at surface casing point
- ☐ BOPE test at intermediate casing point
- ☐ 30 day BOPE test
- ☐ Other

Date/Time _____ _____ AM ☐ PM ☐

Remarks TIME IS APPROXAMATE

RECEIVED
FEB 04 2011
DIV. OF OIL, GAS & MINING

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0144868B

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 920-12J

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047501250000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6515 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 2014 FSL 1926 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWSE Section: 12 Township: 09.0S Range: 20.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ SPUD REPORT Date of Spud:	✓ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
✓ DRILLING REPORT Report Date: 3/31/2011	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

THE SUBJECT WELL WAS PLACED ON PRODUCTION ON 03/31/2011 AT 4:30 PM. THE CHRONOLOGICAL WELL HISTORY WILL BE SUBMITTED WITH THE WELL COMPLETION REPORT.

Accepted by the Utah Division of Oil, Gas and Mining

FOR RECORD ONLY

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Sheila Wopsock	435 781-7024	Regulatory Analyst
SIGNATURE N/A		**DATE** 4/1/2011

RECEIVED Apr. 01, 2011

Form 3160-4
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No. UTU0144868B

1a. Type of Well ☐ Oil Well ☒ Gas Well ☐ Dry ☐ Other
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.
Other

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No. UTU63047A

2. Name of Operator KERR MCGEE OIL & GAS ONSHORE LP — Contact: GINA T. BECKER — E-Mail: gina.becker@anadarko.com

8. Lease Name and Well No. NBU 920-12J

3. Address POBOX 173779 DENVER, CO 80217

3a. Phone No. (include area code) Ph: 720-929-6086

9. API Well No. 43-047-50125

4. Location of Well (Report location clearly and in accordance with Federal requirements)* BHL reviewed by HSM

At surface NWSE 2014FSL 1926FEL 40.048337 N Lat, 109.612839 W Lon

At top prod interval reported below NWSE 2014FSL 1926FEL 40.048337 N Lat, 109.612839 W Lon

At total depth NWSE ~~2014~~ 1966FSL ~~1926~~ 1900FEL 40.048337 N Lat, 109.612839 W Lon

10. Field and Pool, or Exploratory NATURAL BUTTES

11. Sec., T., R., M., or Block and Survey or Area Sec 12 T9S R20E Mer SLB

12. County or Parish UINTAH

13. State UT

14. Date Spudded 11/25/2010

15. Date T.D. Reached 02/04/2011

16. Date Completed ☐ D & A ☒ Ready to Prod. 03/31/2011

17. Elevations (DF, KB, RT, GL)* 4697 GL

18. Total Depth: MD 10840 TVD 10836

19. Plug Back T.D.: MD 10785 TVD 10781

20. Depth Bridge Plug Set: MD TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
GR/RCBL-BHP-HDIL/ZDL/CNGR

22. Was well cored? ☒ No ☐ Yes (Submit analysis)
Was DST run? ☒ No ☐ Yes (Submit analysis)
Directional Survey? ☒ No ☑ Yes (Submit analysis)

23. Casing and Liner Record *(Report all strings set in well)*

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
20.000	14.000 STL	36.7		40		28			
12.250	9.625 J-55	36.0		2764		570		0	
7.875	4.500 I-80	11.6		9598		2194		300	
7.875	4.500 P110	11.6	9598	10828					

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.375	9808							

25. Producing Intervals / 26. Perforation Record

	Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A)	WASATCH	6234	7040	6234 TO 7040	0.360	45	OPEN
B)	MESAVERDE	8476	10354	8476 TO 10354	0.360	110	OPEN
C)							
D)							

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
6234 TO 10354	PUMP 6,152 BBLS SLICK H20 & 224,136 LBS SAND

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
03/31/2011	04/03/2011	24	→	0.0	2044.0	464.0			FLOWS FROM WELL

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status
20/64	1500 SI	2100.0	→	0	2044	464		PGW

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status
			→					

RECEIVED
MAY 10 2011
DIV. OF OIL, GAS & MINING

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #107525 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status

29. Disposition of Gas *(Sold, used for fuel, vented, etc.)*
SOLD

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth
GREEN RIVER	1756				
BIRD'S NEST	2001				
MAHOGANY	2528				
WASATCH	5251	8448			
MESAVERDE	8448	10840			

32. Additional remarks (include plugging procedure):
Attached is the chronological well history & final survey. Completion chrono details individual frac stages.

33. Circle enclosed attachments:

1. Electrical/Mechanical Logs (1 full set req'd.)
2. Geologic Report
3. DST Report
4. Directional Survey
5. Sundry Notice for plugging and cement verification
6. Core Analysis
7 Other:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

Electronic Submission #107525 Verified by the BLM Well Information System.
For KERR MCGEE OIL & GAS ONSHORE,L, sent to the Vernal

Name *(please print)* GINA T. BECKER Title REGULATORY ANALYST

Signature (Electronic Submission) Date 05/04/2011

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fradulent statements or representations as to any matter within its jurisdiction.

**** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ****

US ROCKIES REGION

Operation Summary Report

Well: NBU 920-12J	Spud Conductor: 11/26/2010	Spud Date: 1/13/2011
Project: UTAH-UINTAH	Site: NBU 920-12J	Rig Name No: PIONEER 69/69, PROPETRO/
Event: DRILLING	Start Date: 12/13/2010	End Date: 2/6/2011
Active Datum: RKB @4,715.00ft (above Mean Sea Level)	UWI: NW/SE/0/9/S/20/E/12/0/0/26/PM/S/2,014.00/E/0/1,926.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
1/13/2011	0:00 - 12:30	12.50	MIRU	01	A	P		MOVE ON TO LOCATION, DRESS CONDUCTOR, INSTALL AIR BOWL, RIG UP RIG, WAIT ON PARTS, FIGHT FROZEN EQUIPMENT BUILD DITCH, RIG UP AIR PACKAGE, RIG UP PUMP. WAIT ON JD TO FILL RESERVE PIT.
	12:30 - 13:00	0.50	PRPSPD	01	B	P		P/U 1.50 DEG BENT MOTOR .17 RPG SN 8009, M/U 12.25" Q507 SN 7015010 (2ND RUN).
	13:00 - 19:00	6.00	DRLSUR	02	A	P		SPUD SURFACE 01/13/2011 @ 13:00 DRILL 40'- 550' ('510, 85'/HR) WOB 15-20K RPM 50, MOTOR RPM 93, GPM 550, ON/OFF PSI- 980/740 UP/DOWN/ROT=53/48/49 CIRCULATING RESERVE PIT
	19:00 - 19:30	0.50	DRLSUR	10	B	P		DEVIATION SURVEY @ 500' = 1.4 DEG
	19:30 - 0:00	4.50	DRLSUR	02	A	P		DRILL 550'-710 ('160, 85'/HR) WOB 15-20K RPM 50, MOTOR RPM 93, GPM 550, ON/OFF PSI- 980/740 UP/DOWN/ROT=53/48/49 CIRCULATING RESERVE PIT
1/14/2011	0:00 - 14:00	14.00	DRLSUR	02	A	P		DRILL 710 -1500'(790', 56'/HR) WOB 20-22K RPM 50, MOTOR RPM 93, GPM 550, ON/OFF PSI- 1000/850, UP/DOWN/ROT=80/71/74 CIRCULATING RESERVE PIT
	14:00 - 15:00	1.00	MAINT	08	B	X		WORK ON MUD PUMP
	15:00 - 0:00	9.00	DRLSUR	02	A	P		DRILL 1500'-2060'(560', 62'/HR) WOB 20-22K RPM 50, MOTOR RPM 93, GPM 550, ON/OFF PSI- 1110/950, UP/DOWN/ROT=85/78/79 CIRCULATING RESERVE PIT
1/15/2011	0:00 - 8:00	8.00	DRLSUR	02	A	P		DRILL 2060'-2780'(720', 90'/HR) WOB 20-22K RPM 50, MOTOR RPM 93, GPM 550, ON/OFF PSI- 1310/1010, UP/DOWN/ROT=85/78/79 CIRCULATING RESERVE PIT
	8:00 - 9:30	1.50	DRLSUR	05	F	P		CIRC AND COND HOLE CLEAN
	9:30 - 14:00	4.50	DRLSUR	06	A	P		TOOH, LDDS BIT, MTR AND BHA
	14:00 - 15:00	1.00	CSG	12	A	P		RIG UP TO RUN SURFACE CSG, MOVE EQUIPMENT OUT OF THE WAY, MOVE CSG OVER TO WORK AREA
	15:00 - 20:00	5.00	CSG	12	C	P		HOLD SAFETY MEETING, RUN CSG. RAN 63JTS OF 9-5/8", 36#, IJ-55, 8 RND CSG W/ LTC THREADS. LANDED FLOAT SHOE @ 2750.45' KB. RAN BAFFLE PLATE IN TOP OF SHOE JT LANDED 2707.15' KB. FILL CSG @ 500', 1500', AND 2790'. RUN 200' OF ONR INCH DOWN BACK SIDE.
	20:00 - 20:30	0.50	RDMO	01	E	P		RIG DOWN RIG, RELEASE 1/15/2011 @ 20:30 MOVED RIG BACK OVER TO THE NBU 920-21i WELL, RAN 800' OF DP IN HOLE, PUMPED 100 BBLS OF 10# MUD TO KILL H2O FLOW, RIG DOWN MOVE OFF WELL.

US ROCKIES REGION

Operation Summary Report

Well: NBU 920-12J	Spud Conductor: 11/26/2010	Spud Date: 1/13/2011
Project: UTAH-UINTAH	Site: NBU 920-12J	Rig Name No: PIONEER 69/69, PROPETRO/
Event: DRILLING	Start Date: 12/13/2010	End Date: 2/6/2011
Active Datum: RKB @4,715.00ft (above Mean Sea Level)	UWI: NW/SE/0/9/S/20/E/12/0/0/26/PM/S/2,014.00/E/0/1,926.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	20:30 - 0:00	3.50	CSG	12	E	P		HOLD SAFETY MEETING. INSTALL CEMENT HEAD. PSI TEST TO 2000 PSI. PUMP 10 BBLS OF 8.3# H20 AHEAD. PARTIAL CIRC. PUMP 20 BBLS OF 8.4# GEL WATER AHEAD. PARTIAL CIRC. PUMP 270 SX(183.6 BBLS) 11# 3.82 YIELD LEAD CEMENT, PUMP 200 SX (41 BBLS) OF 15.8# 1.15 YIELD TAIL(2% CALC, 1/4# /SK OF FLOCELE). PARTIAL CIRC. DROP PLUG ON FLY AND DISPLACE W/170 BBLS OF 8.3# H20. LIFT PRESSURE WAS 520 PSI, BUMP PLUG AND HOLD 1000 PSI FOR 5 MIN. FLOAT HELD. TOP OUT, PUMP 100 SX (20.4 BBLS) OF 15.8# 1.15 YIELD TAIL(4 % CALC, 1/4# /SK OF FLOCELE) DOWN 1".CMT TO SURFACE. RIG DOWN CEMENTERS AND RELEASE CEMENTERS 00:00 HRS. CONDUCTOR CASING: Cond. Depth set: 40' Cement sx used: 28 SPUD DATE/TIME: 1/13/2011 @ 13:00 SURFACE HOLE: Surface From depth: 40' Surface To depth: 2,780 Total SURFACE hours: 41.5 Surface Casing size: 8.625" # of casing joints ran: 59 Casing set MD: 2615.28' # sx of cement: 270/200/100 Cement blend (ppg:) 11/15.8/15.8 Cement yield (ft3/sk): 3.82/1.15/1.15 # of bbls to surface: 4 Describe cement issues: NONE Describe hole issues: NONE
1/22/2011	20:00 - 0:00	4.00	DRLPRO	01	A	P		RDRT
1/23/2011	0:00 - 7:00	7.00	DRLPRO	01	E	P		RDRT, DRAIN AND WINTERIZE ALL EQUIP., RD THE FLOOR, BACK YARD, FLARE LINES,CHOKELINES, GAS BUSTER.
	7:00 - 15:00	8.00	DRLPRO	01	A	P		LOADED OUT, MOVED AND SET IN ALL RIG RELATED EQUIP., EXCEPT THE CHOKE HOUSE, AND SUB STAIRS. A CRACK WAS FOUND ON A SUB BEAM. A WELDER WAS CALLED IN FOR THE REPAIR BEFORE WE RAISE THE SUB. WE RAN OUT OF DAYLIGHT FOR RAISING THE DERRICK. 8 TRUCKS 1 FORKLIFT. TRUCKS WERE RELEASED @ 15:00. CRANE STILL ON LOCATION.
	15:00 - 0:00	9.00	DRLPRO	01	B	P		RU WATER LINES,HYD. LINES, ELECTRIC, FLARE LINES,STEAM, SIUT CASES, FINSH RIGGING UP THE BACK YARD, AND SAFETY ITEMS. FINISHED WELDING ON THE SUB @ 17:00
1/24/2011	0:00 - 6:00	6.00	DRLPRO	08	A	Z		RU TIME LOST DUE TO SUB REPAIR. INSTALLING AN AGITATOR IN THE SUCTION PIT, AND A NEW CHARGE PUMP ON #2 PUMP
	6:00 - 17:00	11.00	DRLPRO	01	B	P		SCOPE UP THE SUB AND DERRICK.SET THE CHOKEHOUSE AND LAY CHOKE LINES. SET ALL STAIRS,V-DOOR, PUT UP TARPS. RU THE FLOOR, P/U THE KELLY, CHANGE OUT BOILERS, FINISH MISC. GROUND WORK

US ROCKIES REGION

Operation Summary Report

Well: NBU 920-12J	Spud Conductor: 11/26/2010	Spud Date: 1/13/2011
Project: UTAH-UINTAH	Site: NBU 920-12J	Rig Name No: PIONEER 69/69, PROPETRO/
Event: DRILLING	Start Date: 12/13/2010	End Date: 2/6/2011
Active Datum: RKB @4,715.00ft (above Mean Sea Level)	UWI: NW/SE/0/9/S/20/E/12/0/0/26/PM/S/2,014.00/E/0/1,926.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	17:00 - 20:00	3.00	DRLPRO	14	A	P		NU BOP, GASBUSTER, FLOW LINE, CHOKE LINE AND KILL LINE.
	20:00 - 0:00	4.00	DRLPRO	15	A	P		SM W/ B&C QUICKTEST. TEST FLOOR VALVES, UPPER & LOWER KELLY VALVES ,PIPE RAMS, CHOKE MANIFOLD 250/5 MIN, 5000/ 10 MIN,
1/25/2011	0:00 - 2:00	2.00	DRLPRO	15	A	P		TEST THE PIPE RAMS, BLIND RAMS ,INSIDE & OUT SIDE CHOKE, HCR, KILL LINE VALVES, CHOKE MANIFOLD 250/5 MIN, 5000/ 10 MIN, ANNULAR 250/5 MIN, 2500/10 MIN, CASING TO 1500/30 MIN, R/D TESTER
	2:00 - 5:00	3.00	DRLPRO	08	A	Z		RIG REPAIR. FOOT THROTTLE, FROZEN AIR LINES, AND PIPE SPINNERS.
	5:00 - 13:00	8.00	DRLPRO	06	A	P		INSTALL WEAR BUSHING PU THE BHA AND DP. TIH TO 2600'
	13:00 - 14:30	1.50	DRLPRO	09	A	P		CUT AND SLIPPED 185' OF DRLG LINE
	14:30 - 15:00	0.50	DRLPRO	07	A	P		RIG SERVICE
	15:00 - 15:30	0.50	DRLPRO	14	B	P		INSTALL THE DRILLING RUBBER AND DRIVER BUSHINGS.
	15:30 - 18:00	2.50	DRLPRO	02	F	P		DRILLING FLT. EQUIP AND CEMENT. TAGGED CEMENT @ 2650'
	18:00 - 22:00	4.00	DRLPRO	02	B	P		DRILL F/ 2794'-3170', 386'/4HR.,96.5'/HR, SLID 20' @ 270 AZM., 18-22K/WOB , RPM 50-55, MMRPM 91, SPM 120, GPM 454, UP/SO/ROT 96/85/90, ON/OFF 1400/1080, DIFF 200-400, WT/8.5, VIS/32,
	22:00 - 23:00	1.00	DRLPRO	05	B	S		WE PICKED UP GAS AND A 35-40' FLARE@ 3170'. CIRCULATED AND RAISED MUD WT. TO 9.4# 34/VIS
	23:00 - 0:00	1.00	DRLPRO	02	B	P		DRILL F/ 3170'-3262', 92'/1HR.,92'/HR, SLID 10' @ 270 AZM., 18-23K/WOB , RPM 50-55, MMRPM 91, SPM 120, GPM 454, UP/SO/ROT 96/85/90, ON/OFF 1490/1150, DIFF 300-400, WT/9.5, VIS/34,
1/26/2011	0:00 - 6:00	6.00	DRLPRO	02	B	P		DRILL F/ 3262'-3867', 605'/6HR.,100.8'/HR, SLID 10' @ 340 AZM., 18-23K/WOB , RPM 50-55, MMRPM 91, SPM 120, GPM 454, UP/SO/ROT 96/85/90, ON/OFF 1490/1150, DIFF 300-400, WT/9.9, VIS/36,
	6:00 - 14:30	8.50	DRLPRO	02	B	P		DRILL F/ 3867'-4592', 725'/8.5HR.,85.3'/HR, SLID 30' @ 360 AZM., 18-23K/WOB , RPM 50-55, MMRPM 91, SPM 120, GPM 454, UP/SO/ROT 125/100/115, ON/OFF 1550/1200, DIFF 300-400, WT/10.1, VIS/37,
	14:30 - 15:00	0.50	DRLPRO	07	A	P		RIG SERVICE
	15:00 - 0:00	9.00	DRLPRO	02	B	P		DRILL F/ 4592'-5318', 726'/9HR.,80.1'/HR, SLID 25' @ 360 AZM., 18-23K/WOB , RPM 50-55, MMRPM 91, SPM 120, GPM 454, UP/SO/ROT 124/110/117, ON/OFF 1840/1380, DIFF 350-500, WT/10.5, VIS/37,
1/27/2011	0:00 - 6:00	6.00	DRLPRO	02	B	P		DRILL F/ 5318'-5824', 506'/6HR.,84.3'/HR, 18-23K/WOB , RPM 50-55, MMRPM 91, SPM 120, GPM 454, UP/SO/ROT 132/115/125, ON/OFF 1840/1380, DIFF 350-500, WT/10.5, VIS/37,
	6:00 - 14:00	8.00	DRLPRO	02	B	P		DRILL F/ 5824'-6391', 567'/8HR.,70.9'/HR, SLID 30' @ 340 AZM., 18-23K/WOB , RPM 50-55, MMRPM 91, SPM 120, GPM 454, UP/SO/ROT 155/120/139, ON/OFF 1985/1510, DIFF 350-500, WT/10.7, VIS/39, 80 BBL/SEAPAGE
	14:00 - 14:30	0.50	DRLPRO	07	A	P		RIG SERVICE
	14:30 - 0:00	9.50	DRLPRO	02	B	P		DRILL F/ 6391'-6959',568'/9.5HR.,59.8'/HR, 18-23K WOB , RPM 50-55, MMRPM 91, SPM 120, GPM 454, UP/SO/ROT 158/130/145, ON/OFF 2100/1780, DIFF 350-450, WT/11.4, VIS/40, 40 BBL./LOSS 100 BBL/SEAPAGE

US ROCKIES REGION

Operation Summary Report

Well: NBU 920-12J	Spud Conductor: 11/26/2010	Spud Date: 1/13/2011
Project: UTAH-UINTAH	Site: NBU 920-12J	Rig Name No: PIONEER 69/69, PROPETRO/
Event: DRILLING	Start Date: 12/13/2010	End Date: 2/6/2011
Active Datum: RKB @4,715.00ft (above Mean Sea Level)	UWI: NW/SE/0/9/S/20/E/12/0/0/26/PM/S/2,014.00/E/0/1,926.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
1/28/2011	0:00 - 6:00	6.00	DRLPRO	02	B	P		DRILL F/ 6959'-7307',348'/6HR.,58'/HR, 18-23K WOB , RPM 50-55, MMRPM 91, SPM 120, GPM 454, UP/SO/ROT 162/130/147, ON/OFF 2100/1780, DIFF 350-450, WT/11.4, VIS/40, 40 BBL/SEAPAGE
	6:00 - 15:00	9.00	DRLPRO	02	B	P		DRILL F/ 7307'-7621',314'/9HR.,34.9'/HR, 20-25K WOB , RPM 50-55, MMRPM 91, SPM 120, GPM 454, UP/SO/ROT 168/135/150, ON/OFF 2155/1920, DIFF 200-350, WT/11.5, VIS/40, 60 BBL/SEAPAGE
	15:00 - 15:30	0.50	DRLPRO	07	A	P		RIG SERVICE
	15:30 - 0:00	8.50	DRLPRO	02	B	P		DRILL F/ 7621'-7826',205'/8.5HR.,24.2'/HR, 20-25K WOB , RPM 50-55, MMRPM 91, SPM 120, GPM 454, UP/SO/ROT 170/135/160, ON/OFF 2050/1850, DIFF 200-350, WT/12.0, VIS/39, LCM/3%
1/29/2011	0:00 - 6:00	6.00	DRLPRO	02	B	P		DRILL F/ 7826'-7980',264'/6HR.,44'/HR, 20-25K WOB , RPM 50-55, MMRPM 91, SPM 120, GPM 454, UP/SO/ROT 170/148/162, ON/OFF 2050/1850, DIFF 200-350, WT/12.0, VIS/39, LCM/3% SEAP 40 BBL.
	6:00 - 15:00	9.00	DRLPRO	02	B	P		DRILL F/ 7980'-8253',273'/9HR.,30.3'/HR, 20-25K WOB , RPM 50-55, MMRPM 91, SPM 120, GPM 454, UP/SO/ROT 176/149/165, ON/OFF 2285/1955, DIFF 200-350, WT/12.2, VIS/39, LCM/3% SEAP/ 70 BBL.
	15:00 - 15:30	0.50	DRLPRO	07	A	P		RIG SERVICE
	15:30 - 0:00	8.50	DRLPRO	02	B	P		DRILL F/ 8253'-8435',182'/8.5HR.,21.4'/HR, 20-25K WOB , RPM 50-55, MMRPM 91, SPM 120, GPM 454, UP/SO/ROT 170/155/167, ON/OFF 2150/1980, DIFF 150-300, WT/12.2, VIS/39, LCM/3% SEAP 70 BBL.
1/30/2011	0:00 - 6:00	6.00	DRLPRO	02	B	P		DRILL F/ 8435'-8601,171'/6HR.,28.5'/HR, 20-25K WOB , RPM 50-55, MMRPM 91, SPM 120, GPM 454, UP/SO/ROT 176/155/168, ON/OFF 2150/1980, DIFF 150-300, WT/12.2, VIS/39, LCM/3% SEAP 40 BBL.
	6:00 - 15:00	9.00	DRLPRO	02	B	P		DRILL F/ 8601'-8884',283'/9HR.,31.4'/HR, 20-25K WOB , RPM 50-55, MMRPM 91, SPM 120, GPM 454, UP/SO/ROT 185/155/171, ON/OFF 2150/1980, DIFF 150-300, WT/12.2, VIS/39, LCM/3% SEAP 40 BBL.
	15:00 - 15:30	0.50	DRLPRO	07	A	P		RIG SERVICE
	15:30 - 18:00	2.50	DRLPRO	02	B	P		DRILL F/ 8884'-8979',95'/2.5HR.,38'/HR, 20-25K WOB , RPM 50-55, MMRPM 91, SPM 115, GPM 435, UP/SO/ROT 187/155/175, ON/OFF 2298/2054, DIFF 180-300, WT/12.3+, VIS/40, LCM/4% SEAP 10 BBL. PICKED UP A 35' FLARE @ 8979.
	18:00 - 18:30	0.50	DRLPRO	05	A	S		CIRC. GAS UP AND RAISED THE MUD WT. TO 12.6/WT 44/VIS 5%LCM
	18:30 - 0:00	5.50	DRLPRO	02	B	P		DRILL F/ 8979'-9105',126'/5.5HR.,22.9'/HR, 20-25K WOB , RPM 50-55, MMRPM 87, SPM 115, GPM 435, UP/SO/ROT 187/155/175, ON/OFF 2298/2054, DIFF 150-300, WT/12.9, VIS/43, LCM/6% HAD A 20' FLARE @ 9060' W/ 12.8/MW LOOSING MUD @ 9090', LOST RETURNS @ 9105'
1/31/2011	0:00 - 1:00	1.00	DRLPRO	05	B	X		LOST 60% OF RETURNS. MIXING LCM AND BAR LOST APP 200BBL.
	1:00 - 2:30	1.50	DRLPRO	06	K	X		TOH 30 STANDS TO 7212'
	2:30 - 10:30	8.00	DRLPRO	05	B	X		CIRC. @ A SLOW RATE. BUILDING VOLUME. BROUGHT THE LCM TO 13% 13.0 MW, 46/VIS LOST APP. 400 BBL. WE WERE STILL TAKING LOSSES @ 13% LCM AND RAISED THE LCM TO 22%
	10:30 - 16:30	6.00	DRLPRO	06	A	P		TOH F/ BIT LD MM
	16:30 - 0:00	7.50	DRLPRO	06	A	P		PU A .16 MM AND A Q506FX BIT. TIH. FILLED PIPE @ BHA. BROKE CIRC. @ THE SHOE AND 5500' WE HAD TO WASH THROUGH A COUPLE OF BRIDGES @ 7225'

US ROCKIES REGION

Operation Summary Report

Well: NBU 920-12J	Spud Conductor: 11/26/2010	Spud Date: 1/13/2011
Project: UTAH-UINTAH	Site: NBU 920-12J	Rig Name No: PIONEER 69/69, PROPETRO/
Event: DRILLING	Start Date: 12/13/2010	End Date: 2/6/2011
Active Datum: RKB @4,715.00ft (above Mean Sea Level)	UWI: NW/SE/0/9/S/20/E/12/0/0/26/PM/S/2,014.00/E/0/1,926.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
2/1/2011	0:00 - 1:00	1.00	DRLPRO	06	A	P		TIH
	1:00 - 2:00	1.00	DRLPRO	03	E	P		PU THE KELLY, WASH/REAM 60' TO BOTTOM
	2:00 - 6:00	4.00	DRLPRO	02	B	P		DRILL F/9105'-9169',64'/4HR.,16'/HR, 20-25K WOB , RPM 50-55, MMRPM 87, SPM 115, GPM 435, UP/SO/ROT 185/170/176, ON/OFF 2320/2100, DIFF 150-300, WT/13.1, VIS/43, LCM/18% BIT WAS BALLED UP F/ THE TRIP
	6:00 - 17:00	11.00	DRLPRO	02	B	P		DRILL F/9169'-9485',316'/11HR.,28.7'/HR, 20-25K WOB , RPM 50-55, MMRPM 87, SPM 115, GPM 435, UP/SO/ROT 187/172/178, ON/OFF 2395/2100, DIFF 250-350, WT/13.0, VIS/43, LCM/18% 2-3' FLARE F/ CONNECTIONS
	17:00 - 17:30	0.50	DRLPRO	07	A	P		RIG SERVICE
	17:30 - 0:00	6.50	DRLPRO	02	B	P		DRILL F/ 9485'-9643',158'/6HR.,26.3'/HR, 20-25K WOB , RPM 50-55, MMRPM 87, SPM 115, GPM 435, UP/SO/ROT 185/173/181, ON/OFF 2459/2124, DIFF 250-400, WT/13.2, VIS/43, LCM/18% SLID 14' @ 320 AZM. TO KILL ANGLE
2/2/2011	0:00 - 6:00	6.00	DRLPRO	02	B	P		DRILL F/ 9643'-9833,190'/6HR.,31.7'/HR, 20-25K WOB , RPM 50-55, MMRPM 87, SPM 115, GPM 435, UP/SO/ROT 185/173/181, ON/OFF 2459/2124, DIFF 250-400, WT/13.2, VIS/43, LCM/18%
	6:00 - 16:30	10.50	DRLPRO	02	B	P		DRILL F/ 9833' TO 10086' (253' @ 24' HR) WOB 20-25, RPM 50-60, MMRPM 67, SPM 110, GPM 416, UP/SO/ROT 185-175-183, ON/OFF 2361-2126, DIFF 200-400, WT 13.1, VIS 46, LCM 18%
	16:30 - 17:00	0.50	DRLPRO	07	A	P		RIG SERVICE, FUNCTION ANNULAR
	17:00 - 0:00	7.00	DRLPRO	02	B	P		DRILL F/ 10086' TO 10212' (126' @ 18' HR) WOB 20-25, RPM 45-55, MMRPM 67, SPM 110, GPM 4165, UP/SO/ROT 185-175-183, ON/OFF 2361-2126, DIFF 150-300, WT 13.1, VIS 41, 18% LCM
2/3/2011	0:00 - 3:30	3.50	DRLPRO	02	B	P		DRILL F/ 10212' TO 10269 (57' @ 16.2' HR) WOB 20-25, RPM 40-60, MMRPM 67, SPM 110, GPM 416 ,UP/SO/ROT 194-177-192, ON/OFF 2361-2126, DIFF 150-300, WT 13.1, VIS 41, LCM 16%
	3:30 - 12:00	8.50	DRLPRO	06	A	P		PUMP PILL, BLOW OUT KELLY, TOOH, LAY DOWN DIRECTIONAL TOOLS, BIT , TIGHT 6346, 4934, FUNCTION PIPE RAMS
	12:00 - 14:30	2.50	DRLPRO	06	A	P		P/U HUGHES Q506 F BIT, TIH TO SHOE, FILL PIPE
	14:30 - 16:00	1.50	DRLPRO	09	A	P		CUT & SLIP DRILL LINE
	16:00 - 19:00	3.00	DRLPRO	06	A	P		TIH, (NO PROBLEMS)
	19:00 - 20:30	1.50	DRLPRO	03	D	P		WASH 120' TO BOTTOM, NO FILL
	20:30 - 0:00	3.50	DRLPRO	02	B	P		DRILL F/ 10269' TO 10425' (156' @ 44.5' HR) WOB 18-20, RPM 50-55, MMRPM 67, SPM 110, GPM 416, UP/SO/ROT 193-177-187, ON/OFF 2506-2040, DIFF 250-466, WT 13.1/ VIS 45/ 18% LCM, 20' BOTTOMS UP FLARE
2/4/2011	0:00 - 10:00	10.00	DRLPRO	02	B	P		DRILL F/ 10425' TO 10840' TD @ 10:00 ,2/4/2011 (415' @ 41.5' HR) WOB 18-22. RPM 45-55, MMRPM 67, SPM 110, GPM 416, UP-SO-ROT 195-180-190, ON/OFF 2370-2137, DIFF 170-400, WT 13, VIS 42, 18% LCM
	10:00 - 11:30	1.50	DRLPRO	05	C	P		CIRC F/ SHORT TRIP, MIX & PUMP PILL, BLOW OUT KELLY
	11:30 - 16:00	4.50	DRLPRO	06	E	P		SHORT TRIP TO CASING SHOE, FILL PIPE, (NO PPOBLEMS)
	16:00 - 18:30	2.50	DRLPRO	06	E	P		TIH
	18:30 - 19:00	0.50	DRLPRO	07	A	P		RIG SERVICE, FILL PIPE
	19:00 - 20:00	1.00	DRLPRO	06	E	P		FINISH TIH
	20:00 - 22:00	2.00	DRLPRO	05	C	P		WASH 30' TO BOTTOM, CIRC & COND F/ LOGS

US ROCKIES REGION

Operation Summary Report

Well: NBU 920-12J	Spud Conductor: 11/26/2010	Spud Date: 1/13/2011
Project: UTAH-UINTAH	Site: NBU 920-12J	Rig Name No: PIONEER 69/69, PROPETRO/
Event: DRILLING	Start Date: 12/13/2010	End Date: 2/6/2011
Active Datum: RKB @4,715.00ft (above Mean Sea Level)	UWI: NW/SE/0/9/S/20/E/12/0/0/26/PM/S/2,014.00/E/0/1,926.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	22:00 - 0:00	2.00	DRLPRO	06	B	P		TOOH F/ LOGS
2/5/2011	0:00 - 4:00	4.00	DRLPRO	06	B	P		TOOH F/ LOGS, NO PROBLEMS
	4:00 - 9:30	5.50	DRLPRO	11	C	P		S/M W/ BAKER ATLAS, R/U & RUN TRIPLE COMBO (LOGGERS DEPTH 10851') R/D LOGGERS
	9:30 - 16:00	6.50	DRLPRO	06	A	P		TIH W/ RR TRI CONE
	16:00 - 18:00	2.00	DRLPRO	05	C	P		CIRC & COND F/ LDDP, PUMP PILL, S/M W/ KIMZEY
	18:00 - 0:00	6.00	DRLPRO	06	A	P		R/U L/D MACHINE, LDDP (TIGHT IN SEVERAL SPOTS F/ 10800' TO 9664' & 6922'
2/6/2011	0:00 - 3:00	3.00	DRLPRO	06	A	P		LDDP/ BREAK KELLY, L/D BHA, PULL WEAR RING
	3:00 - 4:00	1.00	DRLPRO	12	A	P		S/M W/ KIMZEY CASERS & RIG UP
	4:00 - 13:00	9.00	DRLPRO	12	C	P		RUN (29 JTS P 110 - 227 JTS I-80)256 JTS TOTAL 4.5, 11.6 PROD CASING SHOE @ 10828.37, FLOAT @ 10784.54, MARKERS @ 8419.18 & 5193.48
	13:00 - 15:00	2.00	DRLPRO	05	D	P		CIRC F/ CEMENT, R/D KIMZEY, S/M w BJ SERVICES
	15:00 - 18:00	3.00	DRLPRO	12	E	P		HOOK UP BJ & PUMP 40 BBLS PREFLUSH, 824 SX 13# ,1.76 YLD LEAD, 1370 SX 14.3#, 1.31 YLD TAIL, DISPLACE W/ 167.7 BBLS CLAY TREAT WATER, FINAL LIFT 3330 PSI, BUMP PLUG @ 4100 PSI, FLOATS HELD, LOST PARTIAL RETURNS 150 BBLS INTO DISPLACEMENT, 10 BBLS LEAD BACK TO PIT, EST TOP OF TAIL 4000'
	18:00 - 19:00	1.00	DRLPRO	12	B	P		FLUSH STACK, R/D CEMENTERS, SET C-22 SLIPS THROUGH STACK @ 108K
	19:00 - 23:00	4.00	DRLPRO	14	A	P		NIPPLE DOWN BOP, CUT OFF CASING, CLEAN PITS, RELEASE RIG @ 23:00 2/6/2011 TO NBU 922-29I1BS-R

US ROCKIES REGION

Operation Summary Report

Well: NBU 920-12J	Spud Conductor: 11/26/2010	Spud Date: 1/13/2011
Project: UTAH-UINTAH	Site: NBU 920-12J	Rig Name No: PIONEER 69/69, PROPETRO/
Event: DRILLING	Start Date: 12/13/2010	End Date: 2/6/2011
Active Datum: RKB @4,715.00ft (above Mean Sea Level)	UWI: NW/SE/0/9/S/20/E/12/0/0/26/PM/S/2,014.00/E/0/1,926.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	23:00 - 23:00	0.00	DRLPRO					CONDUCTOR CASING: Cond. Depth set: 40 Cement sx used: SPUD DATE/TIME: 1/13/2011 13:00 SURFACE HOLE: Surface From depth: 40 Surface To depth: 2,794 Total SURFACE hours: 4105.00 Surface Casing size: 8 5/8 # of casing joints ran: 59 Casing set MD: 2,615.3 # sx of cement: 200/170/135 Cement blend (ppg:) 11/15.8/15.8 Cement yield (ft3/sk): 3.82/1.15/1.15 # of bbls to surface: 4 Describe cement issues: Describe hole issues: PRODUCTION: Rig Move/Skid start date/time: 1/23/2011 7:00 Rig Move/Skid finish date/time: 1/24/2011 17:00 Total MOVE hours: 34.0 Prod Rig Spud date/time: 1/25/2011 15:30 Rig Release date/time: 2/6/2011 23:00 Total SPUD to RR hours: 295.5 Planned depth MD 10,838 Planned depth TVD 10,838 Actual MD: 10,840 Actual TVD: 10,836 Open Wells $: $1,035,081 AFE $: $1,077,988 Open wells $/ft: $95.49 PRODUCTION HOLE: Prod. From depth: 2,794 Prod. To depth: 10,840 Total PROD hours: 186 Log Depth: 10840 Float Collar Top Depth: 10787.54 Production Casing size: 4.5, 11.6, # of casing joints ran: 256 Casing set MD: 10,828.4 Stage 1 # sx of cement: 824 LEAD , 1370 TAIL Cement density (ppg:) 13 LEAD , 14.3 TAIL Cement yield (ft3/sk): 1.76 LEAD , 1.31 TAIL Stage 2 # sx of cement: Cement density (ppg:) Cement yield (ft3/sk): Top Out Cmt # sx of cement: Cement density (ppg:) Cement yield (ft3/sk): Est. TOC (Lead & Tail) or 2 Stage : Describe cement issues: 10 BBLS LEAD BACK Describe hole issues: DIRECTIONAL INFO: KOP: Max angle: Departure:

US ROCKIES REGION

Operation Summary Report

Well: NBU 920-12J	Spud Conductor: 11/26/2010	Spud Date: 1/13/2011
Project: UTAH-UINTAH	Site: NBU 920-12J	Rig Name No: PIONEER 69/69, PROPETRO/
Event: DRILLING	Start Date: 12/13/2010	End Date: 2/6/2011
Active Datum: RKB @4,715.00ft (above Mean Sea Level)	UWI: NW/SE/0/9/S/20/E/12/0/0/26/PM/S/2,014.00/E/0/1,926.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
								Max dogleg MD:

US ROCKIES REGION

Operation Summary Report

Well: NBU 920-12J	Spud Conductor: 11/26/2010	Spud Date: 1/13/2011
Project: UTAH-UINTAH	Site: NBU 920-12J	Rig Name No: SWABBCO 1/1
Event: COMPLETION	Start Date: 3/28/2011	End Date: 3/31/2011
Active Datum: RKB @4,715.00ft (above Mean Sea Level)	UWI: NW/SE/0/9/S/20/E/12/0/0/26/PM/S/2,014.00/E/0/1,926.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
3/28/2011	7:00 - 7:30	0.50	COMP	48		P		HSM, RIGGING UP RIG & EQUIP
	7:30 - 8:30	1.00	COMP	30	A	P		RU RIG ND WH NU BOPS, RU FLOOR.
	8:30 - 15:30	7.00	COMP	31	I	P		TALLY & PU 37/8 BIT & 194 JTS 23/8 L-80 OFF FLOAT TO 6132 ' POOH W/ 194 JTS L/D BIT, ND BOPS NU FV PREP TO TEST CSG & VALVES IN AM SWI SDFN.
3/29/2011	7:00 - 7:30	0.50	COMP	48		P		HSM, STAYING AWAY FROM WELL WHILE TESTING CSG & SURFACE.
	7:30 - 9:30	2.00	COMP	33	C	P		RU B&C, TEST 41/2 CSG TO 500, 2500, 7,000 FOR 15 MIN EACH, TEST SURFACE TO 200 FOR 15 MIN, BUMPED UP TWICE LOST F/ 384# DWN TO 150# IN 15 MIN.
	9:30 - 15:00	5.50	COMP	34	H	P		RU CUTTERS, PU 31/8 EXP GNS, 25 GRM, .36" HOLES 90 DEG PHASING, PERF F/ 10,352'-10,354' 4 SPF 8 HLS, 10,284'-10,286' 4 SPF 8 HLS, 10,214'-10,216' 4 SPF 8 HLS, 24 HOLES. POOH SWI PREP TO FRAC IN AM.
3/30/2011	7:00 - 7:30	0.50	COMP	48		P		HSM, WORKING W/ FRAC & WIRE LINE CREW.
	7:30 - 7:43	0.22	COMP	36	E	P		(STG #1) RU FRAC TECH, PRIME PUMP & LINES & TEST LINES TO 8,000#, HELD SAFTEY MEETING. WHP 1763 PSI, BRK 3817 PSI @ 4.7 BPM, ISIP 2948 PSI, FG .72 PUMP 100 BBLS @ 41.3 BPM @ 6218 PSI = 92% PERFS OPEN. MP 6655 PSI, MR 50.4 BPM, AP 6300 PSI, AR 38.5 BPM, ISIP 3094 PSI, GF .73. NPI 146 PSI, PMPD 816 BBLS SW & 15,678 LBS OF 30/50 SND & 5,000 LBS 20/40 RESIN SAND. TOTAL PROP 20,678 LBS.
	7:43 - 9:47	2.07	COMP	36	E	P		(STG #2) PU 41/2" HAL CBP & 31/8 EXP GNS, 23 GRM, .36" HOLES. 120 & 90 DEG PHASING. SET CBP @ 10,047' & PERF 10,016'-10,017' 4 SPF 4 HLS, 9908'-9911' 3 SPF 9 HLS, 9846'-9849' 3 SPF 9 HLS. 24 TOTAL HOLES WHP 412 PSI, BRK 4390 PSI @ 5.7 BPM, ISIP 2972 PSI, FG .73. PUMP 100 BBLS @ 34.9 BPM @ 5879 PSI = 77% PERFS OPEN. MP 6929 PSI, MR 52.4 BPM, AP 6300 PSI, AR 43.0 BPM, ISIP 3001 PSI, FG ,74. NPI 29 PSI, PMPD 902 BBLS SW & 24,891 LBS OF 30/50 SND & 5,000# 20/40 RESIN SAND. TOTAL PROP 29,891 LBS.
	9:47 - 11:37	1.83	COMP	36	E	P		(STG #3) PU 41/2" HAL CBP & 31/8 EXP GNS, 23 GRM, .36" HOLES. 120 & 90 DEG PHASING. SET CBP @ 9722' & PERF 9696'-9697' 4 SPF 4 HLS, 9636'-9637' 4 SPF 4 HLS, 9620'-9621' 4 SPF 4 HLS, 9570'-9572' 3 SPF 6 HLS. 18 TOTAL HOLES WHP 365 PSI, BRK 4361 PSI @ 5.8 BPM, ISIP 3066 PSI, FG .75. PUMP 100 BBLS @ 23.9 BPM @ 5891 PSI = 56% PERFS OPEN. MP 7126 PSI, MR 42.7 BPM, AP 6550 PSI, AR 26.3 BPM, ISIP 3171 PSI, FG ,76. NPI 106 PSI, PMPD 757 BBLS SW & 16,709 LBS OF 30/50 SND & 5,000# 20/40 RESIN SAND. TOTAL PROP 21,709 LBS.

US ROCKIES REGION

Operation Summary Report

Well: NBU 920-12J	Spud Conductor: 11/26/2010	Spud Date: 1/13/2011
Project: UTAH-UINTAH	Site: NBU 920-12J	Rig Name No: SWABBCO 1/1
Event: COMPLETION	Start Date: 3/28/2011	End Date: 3/31/2011
Active Datum: RKB @4,715.00ft (above Mean Sea Level)	UWI: NW/SE/0/9/S/20/E/12/0/0/26/PM/S/2,014.00/E/0/1,926.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	11:37 - 13:13	1.60	COMP	36	E	P		(STG #4) PU 41/2" HAL CBP & 31/8 EXP GNS, 23 GRM, .36" HOLES. 120 & 90 DEG PHASING. SET CBP @ 8810' & PERF 8784'-8786' 4 SPF 8 HLS, 9740'-8742' 4 SPF 8 HLS, 8708'-8710' 3 SPF 6 HLS. 22 TOTAL HOLES WHP 318 PSI, BRK 4496 PSI @ 5.8 BPM, ISIP 2625 PSI, FG .73. PUMP 100 BBLS @ 46.5 BPM @ 5196 PSI = 100% PERFS OPEN. MP 7097 PSI, MR 53.1 BPM, AP 4850 PSI, AR 51.0 BPM, ISIP 2854 PSI, FG ,76. NPI 229 PSI, PMPD 911 BBLS SW & 28,121 LBS OF 30/50 SND & 5,000# 20/40 RESIN SAND. TOTAL PROP 33,121 LBS.
	13:13 - 14:38	1.42	COMP	36	E	P		(STG #5) PU 41/2" HAL CBP & 31/8 EXP GNS, 23 GRM, .36" HOLES. 90 DEG PHASING. SET CBP @ 8533' & PERF 8505'-8508' 4 SPF 12 HLS, 8476'-8479' 4 SPF 12 HLS. 24 TOTAL HOLES WHP 82 PSI, BRK 4049 PSI @ 5.7 BPM, ISIP 2024 PSI, FG .67. PUMP 100 BBLS @ 44.2 BPM @ 6403 PSI = 77% PERFS OPEN. MP 6638 PSI, MR 52.2 BPM, AP 5450 PSI, AR 48.5 BPM, ISIP 2801 PSI, FG ,76. NPI 777 PSI, PMPD 737 BBLS SW & 20,676 LBS OF 30/50 SND & 5,000# 20/40 RESIN SAND. TOTAL PROP 25,676 LBS.
	14:38 - 16:03	1.42	COMP	36	E	P		(STG #6) PU 41/2" HAL CBP & 31/8 EXP GNS, 23 GRM, .36" HOLES. 120 DEG PHASING. SET CBP @ 7059' & PERF 7036'-7040 3 SPF 12 HLS, 6942'-6946' 3 SPF 12 HLS. 24 TOTAL HOLES WHP 288 PSI, BRK 2831 PSI @ 5.7 BPM, ISIP 2060 PSI, FG .73. PUMP 100 BBLS @ 51.2 BPM @ 4225 PSI = 100% PERFS OPEN. MP 5761 PSI, MR 52.6 BPM, AP 3550 PSI, AR 51.7 BPM, ISIP 1954 PSI, FG ,71. NPI -106 PSI, PMPD 1259 BBLS SW & 51,343 LBS OF 30/50 SND & 5,000# 20/40 RESIN SAND. TOTAL PROP 56,343 LBS.
	16:03 - 17:06	1.05	COMP	36	E	P		(STG #7) PU 41/2" HAL CBP & 31/8 EXP GNS, 23 GRM, .36" HOLES. 120 DEG PHASING. SET CBP @ 6422' & PERF 6402'-6406' 3 SPF 12 HLS, 6234'-6237' 3 SPF 9 HLS. 21 TOTAL HOLES WHP 282 PSI, BRK 2825 PSI @ 5.8 BPM, ISIP 1418 PSI, FG .66. PUMP 100 BBLS @ 51.0 BPM @ 4908 PSI = 100% PERFS OPEN. MP 5467 PSI, MR 52.6 BPM, AP 3750 PSI, AR 51.7 BPM, ISIP 1954 PSI, FG ,72. NPI 377 PSI, PMPD 770 BBLS SW & 31,718 LBS OF 30/50 SND & 5,000# 20/40 RESIN SAND. TOTAL PROP 36,718 LBS.
	17:06 - 18:30	1.40	COMP	34	I	P		(KILL PLUG) RIH SET KILL PLUG @ 6185' POOH RD WIRE LINE & FRAC CREW SWI SDFN. TOTAL PROP = 224,136 LBS TOTAL WATER = 6152 BBLS 767 GALS SCALE INH. 128 GALS BIOCIDE.
3/31/2011	7:00 - 7:30	0.50	COMP	48		P		HSM, TRIPPING TBG
	7:30 - 10:00	2.50	COMP	31	I	P		ND FV, NU BOPS, RU FLOOR, RIH W/ POBS & 194 JTS OUT OF DERICK. RU DRLG EQUIP.

US ROCKIES REGION

Operation Summary Report

Well: NBU 920-12J	Spud Conductor: 11/26/2010	Spud Date: 1/13/2011
Project: UTAH-UINTAH	Site: NBU 920-12J	Rig Name No: SWABBCO 1/1
Event: COMPLETION	Start Date: 3/28/2011	End Date: 3/31/2011
Active Datum: RKB @4,715.00ft (above Mean Sea Level)	UWI: NW/SE/0/9/S/20/E/12/0/0/26/PM/S/2,014.00/E/0/1,926.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	10:00 - 17:00	7.00	COMP	44	C	P		BROKE CIRC CONVENTIONAL TEST BOPS TO 3,000# RIH. C/O 30' SAND TAG 1ST PLUG @ 6185' DRL PLG IN 6 MIN 200# PSI INCREASE RIH. C/O 20' SAND TAG 2ND PLUG @ 6422' DRL PLG IN 8 MIN 800# PSI INCREASE RIH C/O 30' SAND TAG 3RD PLUG @ 7059' DRL PLG IN 11 MIN 700# PSI INCREASE RIH C/O 30' SAND TAG 4TH PLUG @ 8533' DRL PLG IN 5 MIN 1100# PSI INCREASE RIH C/O 25' SAND TAG 5TH PLUG @ 8810' DRL PLG IN 5 MIN 700# PSI INCREASE RIH C/O 25' SAND TAG 6TH PLUG @ 9722' DRL PLG IN 5 MIN 1500# PSI INCREASE RIH C/O 70' SAND TAG 7TH PLUG @ 10,044' DRL PLG IN 3 MIN 700# PSI INCREASE. RIH C/O TO @ 10.463' CIRC CLEAN, RACK OUT SWIVEL. L/D 21 JTS, LAND TBG ON 310 JTS 23/8 L-80. RD FLOOR, ND BOPS NU WH. PUMP OFF BIT, LET WELL SET FOR 30 MIN FOR BIT TO FALL. TURN WELL OVER TO FB CREW. SDFN. SICP = 1800 FTP = 100 KB = 18' HANGER 41/16 = .83' 310 JTS 23/8 L-80 = 9786.90' (SURFAC VALVE OPEN) 1.875 X/N & POBS = 2.20' EOT @ 9807.93' TWTR = 6292 BBLS TWR = 1700 BBLS TWLTR = 4592 BBLS 347 JTS HAULED OUT 310 LANDED 37 TO RETURN
	16:30 - 13:00		PROD	50				WELL TURNED TO SALES @ 1630 HR ON 3/31/11 - 700 MCFD, 2160 BWPD, FTP 1675#, CP 1775#, CK 20/64"
4/1/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 2125#, TP 1950#, 20/64" CK, 35 BWPH, MED SAND, 1.4 GAS TTL BBLS RECOVERED: 2500 BBLS LEFT TO RECOVER: 3792
4/2/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 2475#, TP 1750#, 20/64" CK, 20 BWPH, LIGHT SAND, - GAS TTL BBLS RECOVERED: 3177 BBLS LEFT TO RECOVER: 3115
4/3/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 2175#, TP 1500#, 20/64" CK, 15 BWPH, LIGHT SAND, - GAS TTL BBLS RECOVERED: 3641 BBLS LEFT TO RECOVER: 2651
4/4/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 2025#, TP 1275#, 20/64" CK, 15 BWPH, LIGHT SAND, 1.9 GAS TTL BBLS RECOVERED: 4017 BBLS LEFT TO RECOVER: 2275

US ROCKIES REGION

Operation Summary Report

Well: NBU 920-12J	Spud Conductor: 11/26/2010	Spud Date: 1/13/2011	
Project: UTAH-UINTAH	Site: NBU 920-12J		Rig Name No: SWABBCO 1/1
Event: COMPLETION	Start Date: 3/28/2011		End Date: 3/31/2011
Active Datum: RKB @4,715.00ft (above Mean Sea Level)	UWI: NW/SE/0/9/S/20/E/12/0/0/26/PM/S/2,014.00/E/0/1,926.00/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
4/5/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 1900#, TP 1250#, 20/64" CK, 15 BWPH, LIGHT SAND, 1.8 GAS TTL BBLS RECOVERED: 4362 BBLS LEFT TO RECOVER: 1930

1 General

1.1 Customer Information

Company	US ROCKIES REGION
Representative	
Address	

1.2 Well Information

Well	NBU 920-12J	**Wellbore No.**	OH
Well Name	NBU 920-12J	**Common Name**	NBU 920-12J
Project	UTAH-UINTAH	**Site**	NBU 920-12J
Vertical Section Azimuth	151.72 (°)	**North Reference**	True
Origin N/S	0.0 (ft)	**Origin E/W**	0.0 (ft)
Spud Date	1/13/2011	**UWI**	NW/SE/0/9/S/20/E/12/0/0/26/PM/S/2,014.00/E/0/1,926.00/0/0
Active Datum	RKB @4,715.00ft (above Mean Sea Level)		

2 Survey Name

2.1 Survey Name: Survey #1

Survey Name	Survey #1	**Company**	PROPETRO SERVICES
Started	1/13/2011	**Ended**	
Tool Name	MSS	**Engineer**	Anadarko

2.1.1 Tie On Point

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)
14.00	0.00	0.00	14.00	0.00	0.00

2.1.2 Survey Stations

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
1/13/2011	Tie On	14.00	0.00	0.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1/13/2011	NORMAL	314.00	1.40		313.97	3.67	0.00	-3.23	0.47	0.47	0.00	0.00
1/14/2011	NORMAL	1,014.00	1.60		1,013.73	21.99	0.00	-19.37	0.03	0.03	0.00	0.00
	NORMAL	1,514.00	1.30		1,513.57	34.64	0.00	-30.51	0.06	-0.06	0.00	180.00
	NORMAL	2,014.00	2.60		2,013.27	51.65	0.00	-45.49	0.26	0.26	0.00	0.00
	NORMAL	2,514.00	2.70		2,512.73	74.77	0.00	-65.85	0.02	0.02	0.00	0.00

2.2 Survey Name: Survey #2

Survey Name	Survey #2	**Company**	SCIENTIFIC
Started	1/25/2011	**Ended**	
Tool Name	MWD	**Engineer**	JARED

2.2.1 Tie On Point

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)
2,514.00	2.70	0.00	2,512.73	74.77	0.00

2.2.2 Survey Stations

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
1/25/2011	Tie On	2,514.00	2.70	0.00	2,512.73	74.77	0.00	-65.85	0.00	0.00	0.00	0.00
1/25/2011	NORMAL	2,821.00	2.99	91.87	2,819.49	81.74	8.01	-68.20	1.33	0.09	29.93	133.07
	NORMAL	3,144.00	0.88	89.05	3,142.28	81.51	18.91	-62.83	0.65	-0.65	-0.87	-178.82
1/26/2011	NORMAL	3,777.00	0.97	211.22	3,775.25	77.35	20.28	-58.52	0.23	0.20	12.97	59.18
1/26/2011	NORMAL	3,460.00	0.35	170.09	3,458.27	80.60	21.50	-60.80	0.28	-0.17	25.65	157.27
	NORMAL	4,090.00	1.14	242.42	4,088.20	73.64	16.14	-57.21	0.19	0.05	9.97	89.50
	NORMAL	4,404.00	1.58	206.39	4,402.11	68.32	11.45	-54.74	0.30	0.14	-11.47	-81.56
	NORMAL	4,531.00	1.14	203.22	4,529.08	65.59	10.17	-52.95	0.35	-0.35	-2.50	-171.88
	NORMAL	4,720.00	0.79	196.28	4,718.05	62.61	9.07	-50.85	0.19	-0.19	-3.67	-164.98
	NORMAL	5,038.00	0.97	196.72	5,036.01	57.93	7.68	-47.38	0.06	0.06	0.14	2.37
1/27/2011	NORMAL	5,354.00	0.62	176.15	5,351.98	53.66	7.02	-43.93	0.14	-0.11	-6.51	-150.78
	NORMAL	5,670.00	0.88	166.92	5,667.95	49.59	7.69	-40.03	0.09	0.08	-2.92	-29.59
	NORMAL	5,983.00	0.53	166.25	5,980.93	45.85	8.57	-36.31	0.11	-0.11	-0.21	-178.99
	NORMAL	6,299.00	1.32	336.55	6,296.91	47.77	7.47	-38.53	0.58	0.25	53.89	173.07
	NORMAL	6,615.00	0.44	304.03	6,612.87	51.78	5.02	-43.23	0.31	-0.28	-10.29	-166.00
	NORMAL	6,931.00	0.33	204.74	6,928.87	51.64	3.63	-43.75	0.19	-0.03	-31.42	-146.57
1/28/2011	NORMAL	7,246.00	0.88	196.28	7,243.85	48.49	2.58	-41.48	0.18	0.17	-2.69	-13.47
	NORMAL	7,561.00	1.32	181.69	7,558.79	42.54	1.79	-36.62	0.16	0.14	-4.63	-39.91
1/29/2011	NORMAL	8,037.00	1.58	181.87	8,034.64	30.50	1.41	-26.19	0.05	0.05	0.04	1.09
1/30/2011	NORMAL	8,509.00	1.67	159.45	8,506.45	17.56	3.62	-13.75	0.14	0.02	-4.75	-93.25
	NORMAL	8,976.00	2.11	148.91	8,973.20	3.82	10.44	1.58	0.12	0.09	-2.26	-43.66
2/1/2011	NORMAL	9,457.00	2.55	152.25	9,453.80	-13.23	20.00	21.12	0.10	0.09	0.69	18.82
2/2/2011	NORMAL	9,931.00	1.32	168.86	9,927.52	-27.92	25.96	36.89	0.28	-0.26	3.50	163.64
	NORMAL	10,176.00	1.23	183.18	10,172.46	-33.31	26.36	41.83	0.13	-0.04	5.84	112.85
2/6/2011	NORMAL	10,840.00	1.23	183.18	10,836.31	-47.54	25.57	53.98	0.00	0.00	0.00	0.00